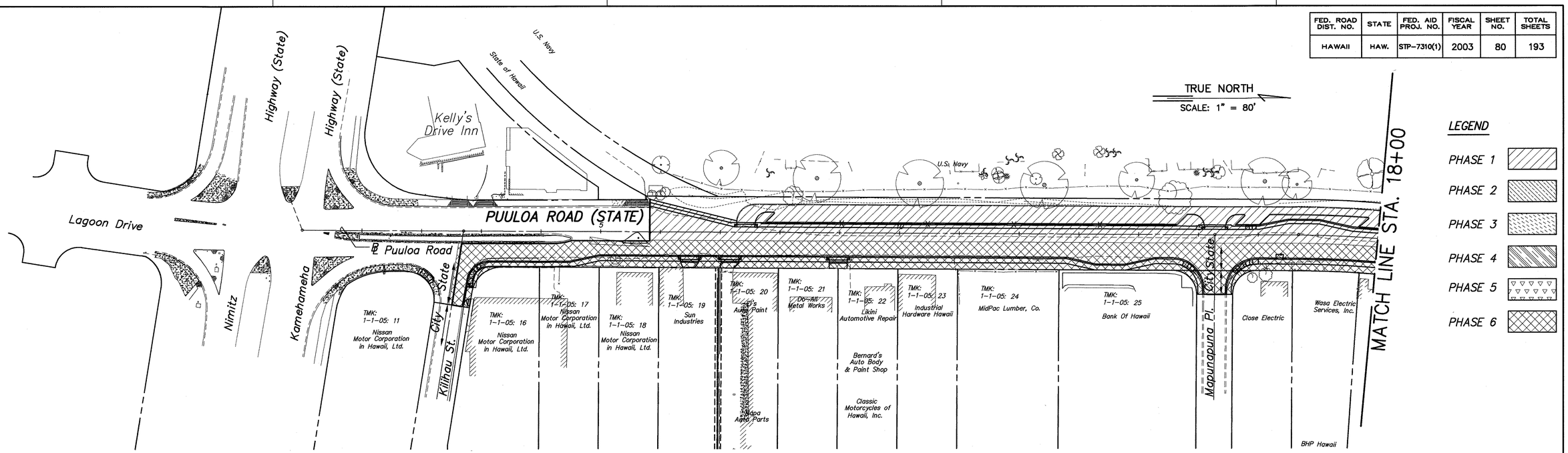
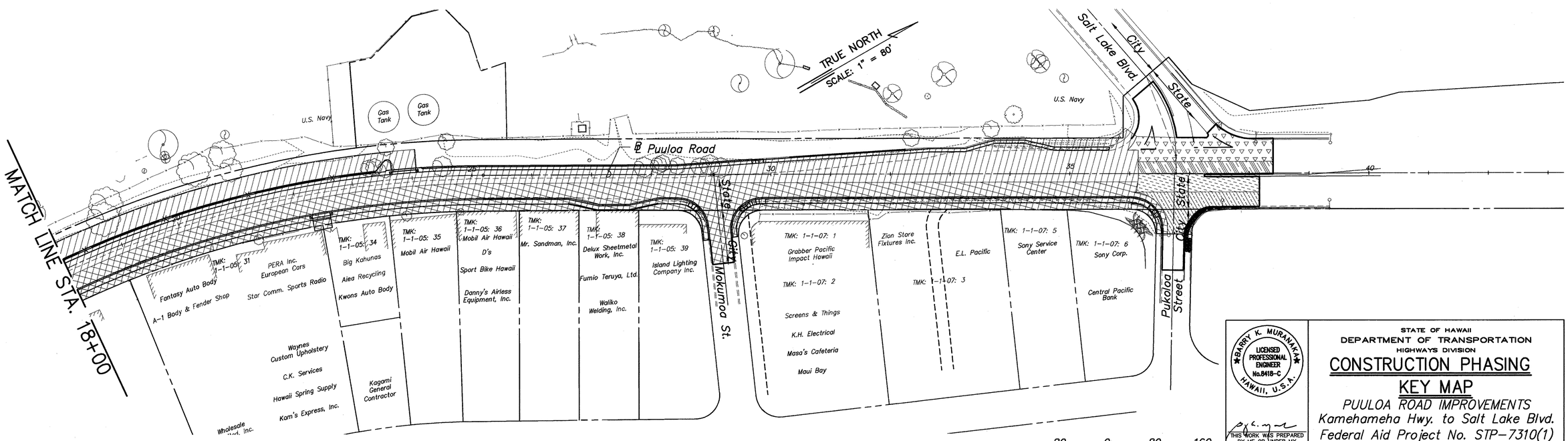
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-7310(1)	2003	80	193



CONSTRUCTION PHASING

SCALE: 1" = 80'



CONSTRUCTION PHASING

SCALE: 1" = 80'

80 0 80 160

SCALE: 1" = 80'

BARRY K. MURANAKA
LICENSED PROFESSIONAL ENGINEER
No.8418-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Expiration Date of the License: 04/30/04

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CONSTRUCTION PHASING

KEY MAP

PUULOA ROAD IMPROVEMENTS
Kamehameha Hwy. to Salt Lake Blvd.
Federal Aid Project No. STP-7310(1)

Scale: As shown Date: May 2003

SHEET NO. 80 OF 193 SHEETS

80

P.M.: STY
CURRENT OPR: rki
PREV. OPR:
CURRENT TIME: May 10, 2003 - 10:49am
LAST SAVED BY:
LAST MODIFIED: Sat, 10 May 2003 - 10:48am

PREFIX: G:\DOTH9601A\ACAD\
FILE: Dot96162a.dwg
BEGIN: 12/01/99
SCALE: 1=1

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
NOTEBOOK	TRACED BY	
	DESIGNED BY	
	QUANTITIES BY	
No.	CHECKED BY	

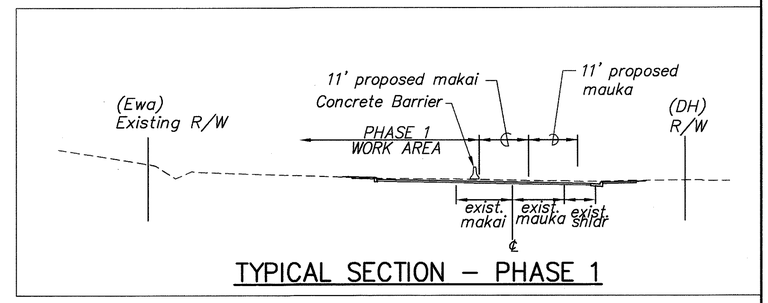
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-7310(1)	2003	81	193

Phase I Construction – Major Items:

1. Clear & grub, removal of trees
2. Grading
3. Excavate to bottom of sidewalk, retaining wall and required pavement section
4. Hand excavate around utility manholes and adjust as required
5. Construct drainage system
6. Install all Electric, Telephone, Cable Television, and AT & T Underground Ductline, Manholes, Handholes, Pullboxes, and Conduit Risers Complete. See Sheet 94 for Additional Notes.
7. Construct curb, sidewalk, driveways, retaining wall, and fencing.
8. Construct subbase course
9. Construct permeable layer course
10. Construct base course
11. Construct A.C. pavement
12. Provide and install pavement markings and markers
13. Install permanent traffic signs
14. Construct Off-Street Parking lot.

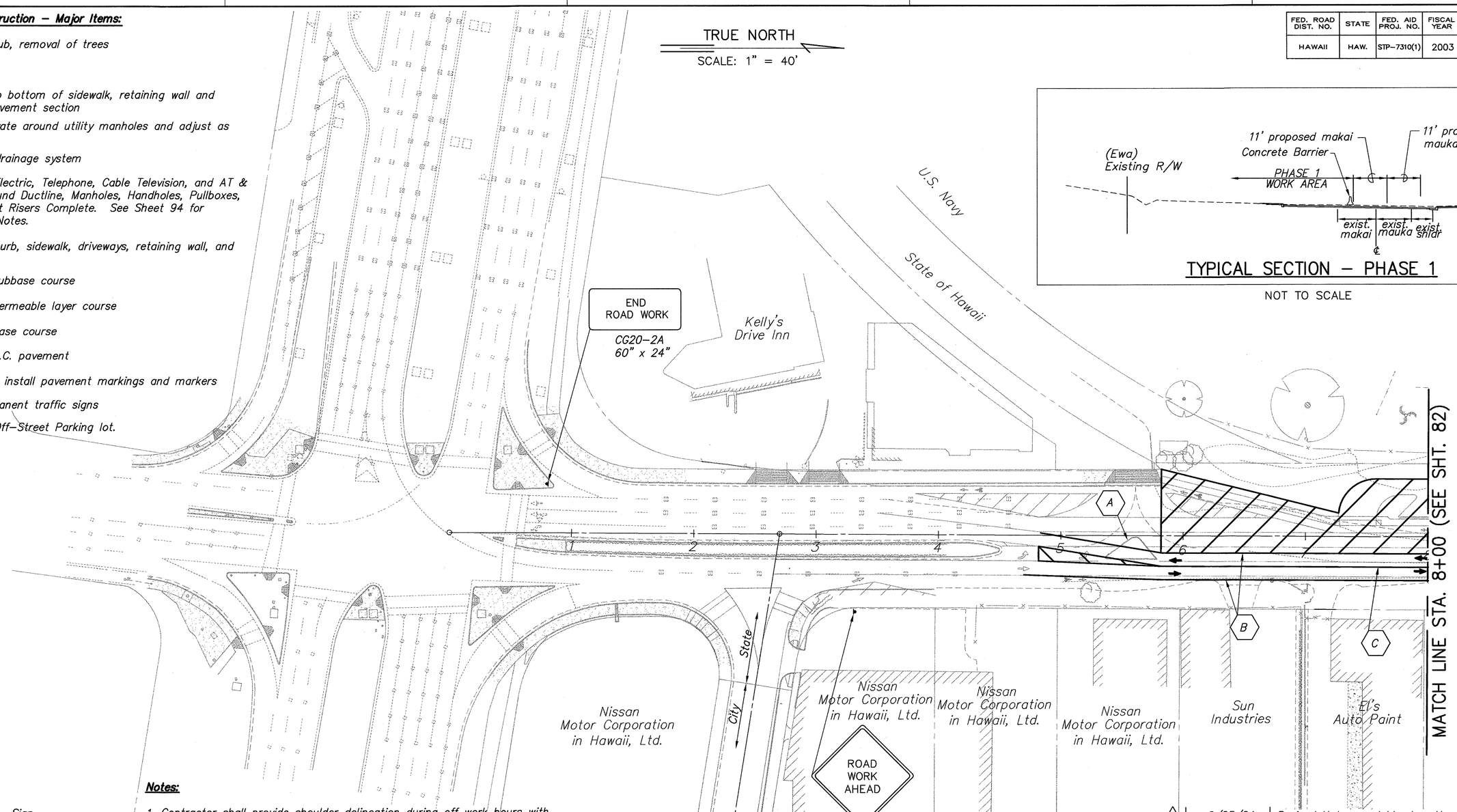
TRUE NORTH

SCALE: 1" = 40'



TYPICAL SECTION – PHASE 1

NOT TO SCALE



PLAN – PHASE 1

SCALE: 1" = 40'

Legend

- Sign
- Cone or Delineators
- Direction of Traffic
- Flagman
- Police Officer
- Work Area

Notes:

1. Contractor shall provide shoulder delineation during off work hours with steady burn lights on Type II barricades @ 100' o.c.
2. Cones or delineators shall be installed as shown on sheet 94.
3. When excavating within five feet of traffic lanes. The Contractor shall use a continuous line of portable concrete or polyethylene type barriers.
4. Steady burn lights shall be provided on portable barriers and barricades @ 40' o.c.
5. All temporary striping and pavement markings shall be tape.
6. Remove/Cover all existing signs that are not applicable.
7. The Contractor shall follow the approved phasing plans and any deviation from the phasing plans must be approved by the Engineer.
8. Install temporary striping as shown.
9. Install necessary signage to accomodate temporary striping.

40 0 40 80

SCALE: 1" = 40'

A – Remove exist. A.C. curb

C – Temporary 4" double solid yellow stripe.

B – Temporary 4" solid white stripe.

DATE	REVISION
2/25/04	Revised Note per Addendum No. 3
1/28/04	Replace Sheet per Addendum No. 1

BARRY K. MURANAKA – LICENSED PROFESSIONAL ENGINEER No.8418-C – HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Expiration Date of the License: 04/30/04

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CONSTRUCTION PHASING PLAN
PHASE 1
STA. 0+00 TO 8+00

PUULOA ROAD IMPROVEMENTS
Kamehameha Hwy. to Salt Lake Blvd.
Federal Aid Project No. STP-7310(1)

Scale: As shown Date: May 2003

SHEET NO. 81 OF 193 SHEETS

ADD. 81

PREFIX: G:\DOTH9601A\ACAD\
FILE: Dot96163a.dwg
BEGIN: 12/01/99
SCALE: 1=1

P.M.: STY
CURRENT OPR: mxf
PREV. OPR:
CURRENT TIME: Feb 23, 2004 – 1:05pm
LAST SAVED BY:
LAST MODIFIED: Mon, 23 Feb 2004 – 9:58am

ORIGINAL PLAN | SURVEY PLOTTED BY | DRAWN BY | TRACED BY | DESIGNED BY | QUANTITIES BY | CHECKED BY | DATE | NOTEBOOK | No.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-7310(1)	2003	82	193

TRUE NORTH

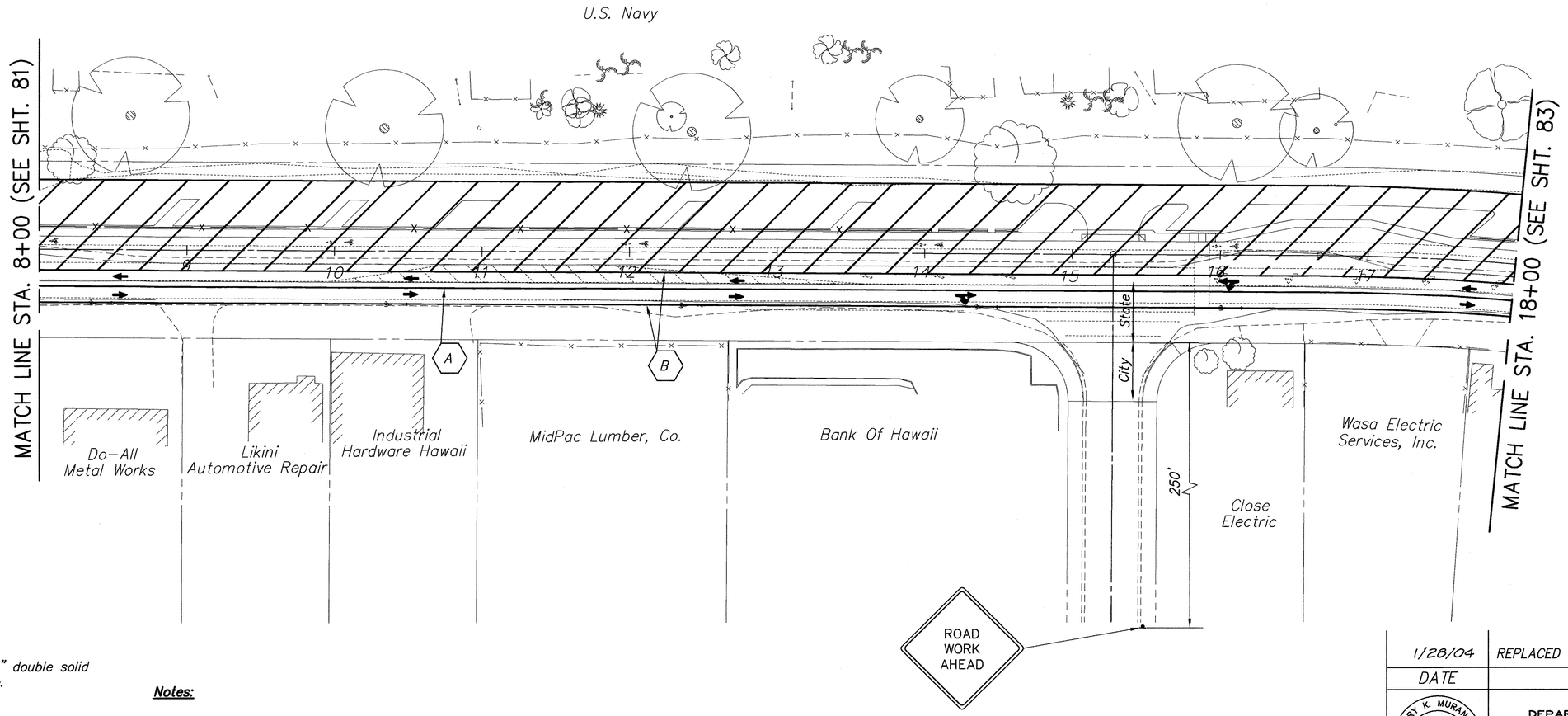
SCALE: 1" = 40'

Legend

- Sign
- Cone or Delineators
- Direction of Traffic
- Flagman
- Police Officer
- Work Area

Phase I Construction – Major Items:

1. Clear & grub, removal of trees
2. Grading
3. Excavate to bottom of sidewalk, retaining wall and required pavement section
4. Hand excavate around utility manholes and adjust as required
5. Construct drainage system
6. Install all Electric, Telephone, Cable Television, and AT & T Underground Ductline, Manholes, Handholes, Pullboxes, and Conduit Risers Complete. See Sheet 94 for Additional Notes.
7. Construct curb, sidewalk, driveways, retaining wall, and fencing.
8. Construct subbase course
9. Construct permeable layer course
10. Construct base course
11. Construct A.C. pavement
12. Provide and install pavement markings and markers
13. Install permanent traffic signs
14. Construct Off-Street Parking lot.



A — Temporary 4" double solid yellow stripe.

B — Temporary 4" solid white stripe.

Notes:

1. Install temporary striping as shown.
2. Install necessary signage to accomodate temporary striping.
3. Remove/Cover exist signs that are not applicable.
4. The Contractor shall follow the approved phasing plans and any deviation from the phasing plans must be approved by the Engineer.

PLAN – PHASE 1

SCALE: 1" = 40'

40 0 40 80

SCALE: 1" = 40'

DATE	REVISION
1/28/04	REPLACED SHEET PER ADDENDUM NO. 1

BARRY K. MURANAKA LICENSED PROFESSIONAL ENGINEER No.8418-C HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Expiration Date of the License: 04/30/04

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CONSTRUCTION PHASING PLAN
PHASE 1
STA. 8+00 TO 18+00

PUULOA ROAD IMPROVEMENTS
Kamehameha Hwy. to Salt Lake Blvd.
Federal Aid Project No. STP-7310(1)

Scale: As shown Date: May 2003

SHEET NO. 82 OF 193 SHEETS

ADD. 82

P.M.: STY
CURRENT OPR: mkf
PREV. OPR:
CURRENT TIME: Jan 16, 2004 – 3:19pm
LAST SAVED BY:
LAST MODIFIED: Mon, 15 Dec 2003 – 4:36pm

PREFIX: G:\DOTH9601A\ACAD\
FILE: Dot96164a.dwg
BEGIN: 12/01/99
SCALE: 1=1

ORIGINAL PLAN | NOTEBOOK No. | SURVEY PLOTTED BY | DRAWN BY | TRACED BY | PROOFREAD BY | QUANTITIES BY | CHECKED BY | DATE

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-7310(1)	2003	83	193

Phase I Construction – Major Items:

1. *Clear & grub, removal of trees*
2. *Grading*
3. *Excavate to bottom of sidewalk, retaining wall and required pavement section*
4. *Hand excavate around utility manholes and adjust as required*
5. *Construct drainage system*
6. *Install all Electric, Telephone, Cable Television, and AT & T Underground Ductline, Manholes, Handholes, Pullboxes, and Conduit Risers Complete. See Sheet 94 for Additional Notes.*
7. *Construct curb, sidewalk, driveways, retaining wall, and fencing.*
8. *Construct subbase course*
9. *Construct permeable layer course*
10. *Construct base course*
11. *Construct A.C. pavement*
12. *Provide and install pavement markings and markers*
13. *Install permanent traffic signs*
14. *Construct Off-Street Parking lot.*

(A) *Provide access at all times and police officer or flagman as needed during work hours. Contractor to complete construction improvements on one side of driveway before proceeding with construction on other side of driveway to allow access at all times.*

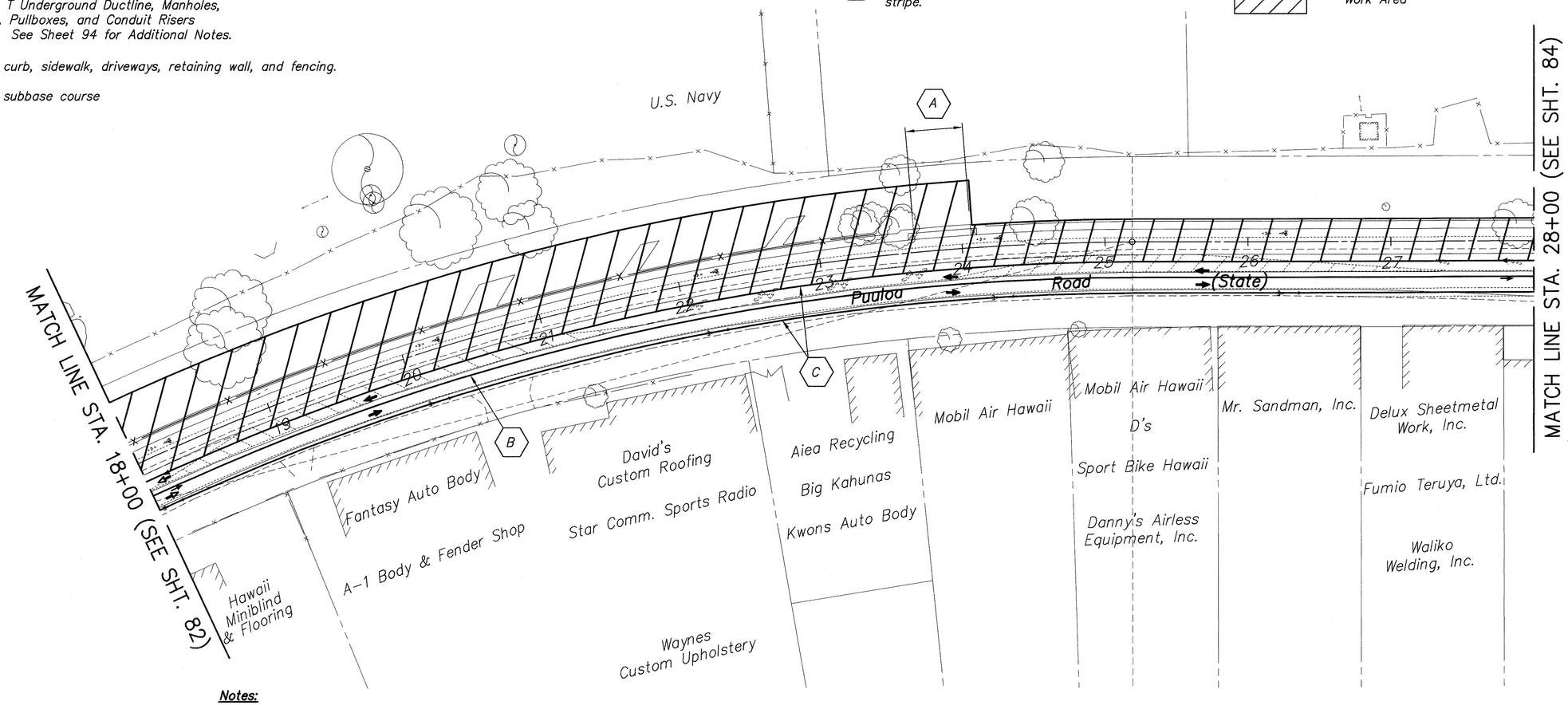
(B) *Temporary 4" double solid yellow stripe.*

(C) *Temporary 4" solid white stripe.*

Legend

- *Sign*
- *Cone or Delineators*
- *Direction of Traffic*
- *Flagman*
- *Police Officer*
- *Work Area*

TRUE NORTH
SCALE: 1" = 40'



Notes:

1. *Install temporary striping as shown.*
2. *Install necessary signage to accomodate temporary striping.*
3. *Remove/Cover exist signs that are not applicable.*
4. *The Contractor shall follow the approved phasing plans and any deviation from the phasing plans must be approved by the Engineer.*

PLAN – PHASE 1
SCALE: 1" = 40'

40 0 40 80
SCALE: 1" = 40'

DATE	REVISION
1/28/04	REPLACED SHEET PER ADDENDUM NO. 1

BARRY K. MURANAKA
LICENSED PROFESSIONAL ENGINEER
No.8418-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
Expiration Date of the License: 04/30/04

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CONSTRUCTION PHASING PLAN
PHASE 1
STA. 18+00 TO 28+00

PUULOA ROAD IMPROVEMENTS
Kamehameha Hwy. to Salt Lake Blvd.
Federal Aid Project No. STP-7310(1)

Scale: As shown *Date: May 2003*

SHEET NO. 83 OF 193 SHEETS

ADD. 83

P.M.: STY
CURRENT OPR: mkf
PREV. OPR:
CURRENT TIME: Jan 16, 2004 – 3:28pm
LAST SAVED BY:
LAST MODIFIED: Wed, 17 Dec 2003 – 8:31am

PREFIX: G:\DOTH96001A\ACAD\
FILE: Do196165o.dwg
BEGIN: 12/01/99
SCALE: 1=1

ORIGINAL PLAN
NOTEBOOK
No.
SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY
DATE

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-7310(1)	2003	84	193

Phase I Construction – Major Items:

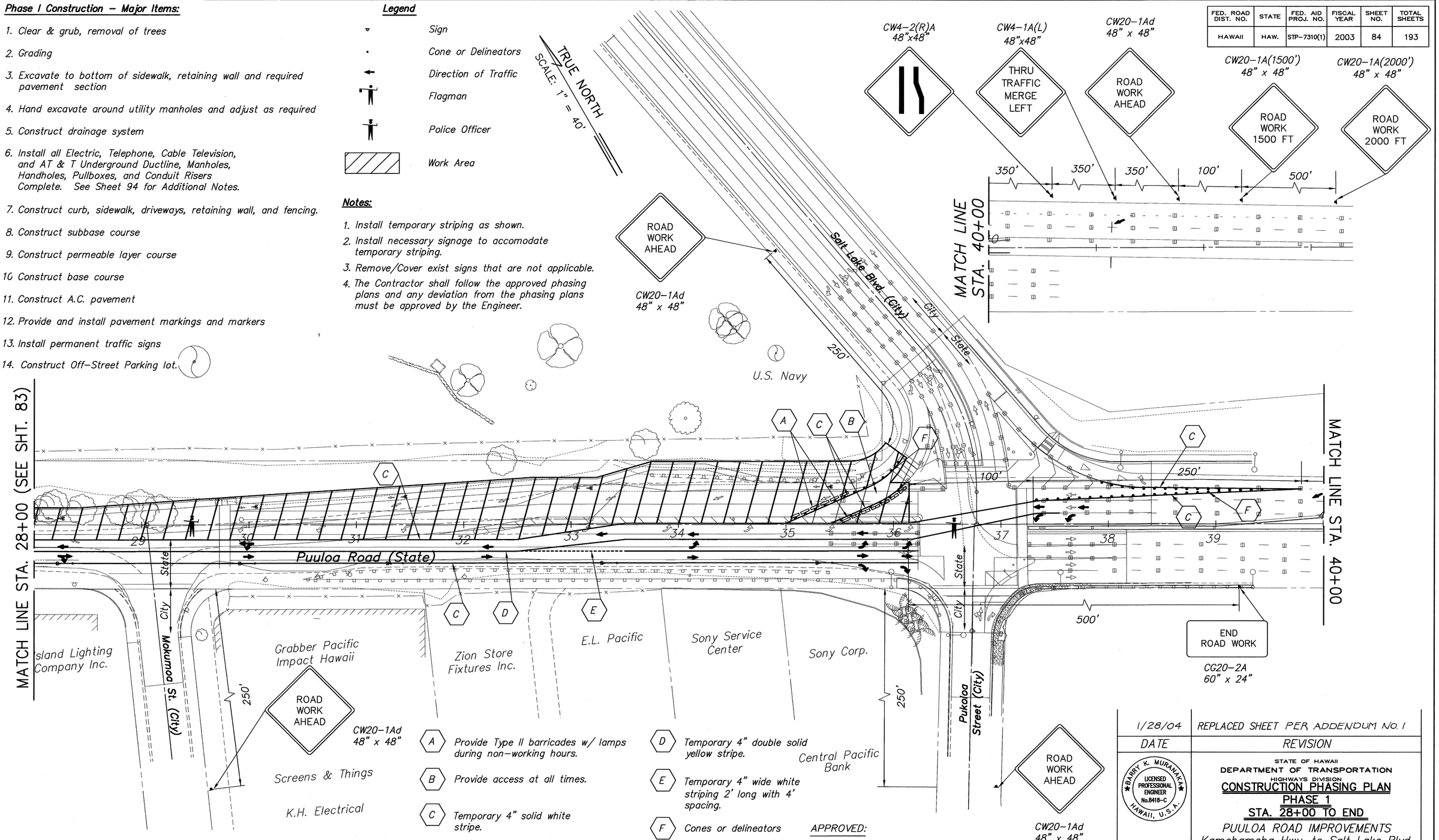
1. Clear & grub, removal of trees
2. Grading
3. Excavate to bottom of sidewalk, retaining wall and required pavement section
4. Hand excavate around utility manholes and adjust as required
5. Construct drainage system
6. Install all Electric, Telephone, Cable Television, and AT & T Underground Ductline, Manholes, Handholes, Pullboxes, and Conduit Risers Complete. See Sheet 94 for Additional Notes.
7. Construct curb, sidewalk, driveways, retaining wall, and fencing.
8. Construct subbase course
9. Construct permeable layer course
10. Construct base course
11. Construct A.C. pavement
12. Provide and install pavement markings and markers
13. Install permanent traffic signs
14. Construct Off-Street Parking lot.

Legend

- Sign
- Cone or Delineators
- Direction of Traffic
- Flagman
- Police Officer
- Work Area

Notes:

1. Install temporary striping as shown.
2. Install necessary signage to accomodate temporary striping.
3. Remove/Cover exist signs that are not applicable.
4. The Contractor shall follow the approved phasing plans and any deviation from the phasing plans must be approved by the Engineer.



PLAN – PHASE 1
SCALE: 1" = 40'

APPROVED:

Chief, Traffic Review Branch, D.P.P.
(For work within City R/W only)

2/27/04
Date

DATE	REVISION
1/28/04	REPLACED SHEET PER ADDENDUM No. 1

BARRY K. MURANAKA LICENSED PROFESSIONAL ENGINEER No. 8418-C HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
Expiration Date of the License: 04/30/04

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CONSTRUCTION PHASING PLAN
PHASE 1
STA. 28+00 TO END

PUULOA ROAD IMPROVEMENTS
Kamehameha Hwy. to Salt Lake Blvd.
Federal Aid Project No. STP-7310(1)

Scale: As shown Date: May 2003

SHEET NO. 84 OF 193 SHEETS

ADD. 84

PREFIX: G:\DOTH9601A\ACAD\
FILE: Dot96166a.dwg
BEGIN: 12/01/99
SCALE: 1=1

P.M.: STY
CURRENT OPR: mkf
PREV. OPR:
CURRENT TIME: Jan 16, 2004 – 3:30pm
LAST SAVED BY:
LAST MODIFIED: Wed, 17 Dec 2003 – 8:35am

ORIGINAL PLAN | NOTEBOOK | No. | SURVEY PLOTTED BY | DRAWN BY | TRACED BY | DESIGNED BY | QUANTITIES BY | CHECKED BY | DATE

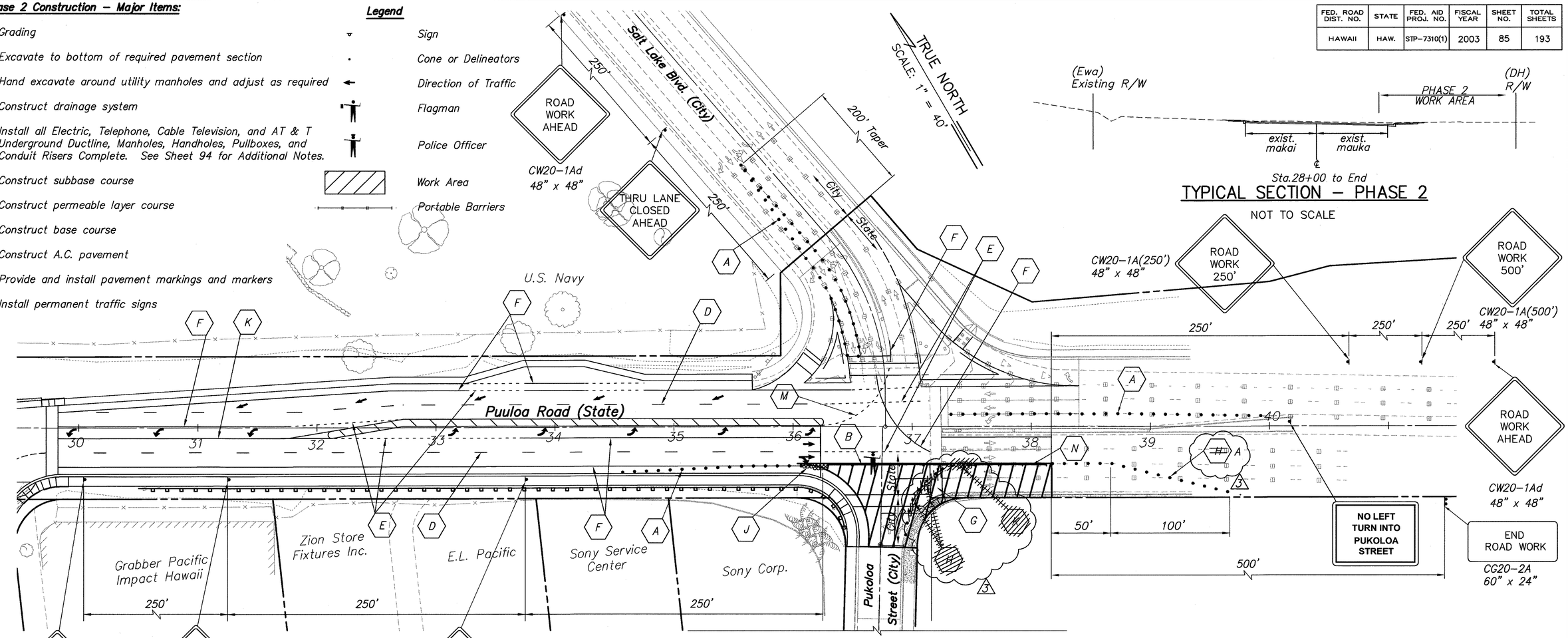
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-7310(1)	2003	85	193

Phase 2 Construction – Major Items:

1. Grading
2. Excavate to bottom of required pavement section
3. Hand excavate around utility manholes and adjust as required
4. Construct drainage system
5. Install all Electric, Telephone, Cable Television, and AT & T Underground Ductline, Manholes, Handholes, Pullboxes, and Conduit Risers Complete. See Sheet 94 for Additional Notes.
6. Construct subbase course
7. Construct permeable layer course
8. Construct base course
9. Construct A.C. pavement
10. Provide and install pavement markings and markers
11. Install permanent traffic signs

Legend

- Sign
- Cone or Delineators
- Direction of Traffic
- Flagman
- Police Officer
- Work Area
- Portable Barriers



TYPICAL SECTION – PHASE 2

NOT TO SCALE

Notes:

1. For Detour Plan see Sht. 93.
2. All work to be completed during night hours. All lanes shall be opened during non-working hours, unless otherwise noted.
3. Contractor shall provide shoulder delineation during off work hours with steady burn lights on Type II barricades @ 100' o.c.
4. Cones or delineators shall be installed as shown in Table 1 on sheet 94.
5. When excavating within five feet of traffic lanes. The Contractor shall use a continuous line of portable concrete or polyethylene type barriers.
6. Steady burn lights shall be provided on portable barriers and barricades @ 40' o.c.
7. All temporary striping and pavement markings shall be tape.
8. Remove all existing sign in the work area unless otherwise noted.

- (A) Cones or delineators
- (B) Portable Barriers
- (C) Portable Barriers, to remain during non-working hours.
- (D) Temporary Striping – 4" wide white 10' long w/ 30' spacing
- (E) Temporary 4" wide white striping 2' long with 4' spacing
- (F) Temporary 4" solid white stripe
- (G) Provide pedestrian access during construction
- (H) ~~Delineators and/or Type II Barricades to remain to during non-working hours.~~ (3)
- (J) Provide End Treatment, See Sheet 94.
- (K) Provide End Treatment, to remain during non-working hours. See Sheet 94.
- (L) Temporary 4" double solid yellow stripe.
- (M) Temporary 4" wide yellow striping 2' long with 4' spacing (3)
- (N) Portable Barriers, to remain during non-working hours.
- (O) Pukoloa St. closed during working hours. See Detour Plan Sht. 93.

PLAN – PHASE 2

SCALE: 1" = 40'

40 0 40 80

SCALE: 1" = 40'

APPROVED:

Chief, Traffic Review Branch, D.P.P. — Date
(For work within City R/W only)

DATE	REVISION
2/25/04	Revised Delineator per Addendum No. 3
1/28/04	Replaced Sheet per Addendum No. 1

BARRY K. MURAHAKA — LICENSED PROFESSIONAL ENGINEER No.8418-C — HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Expiration Date of the License: 04/30/04

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CONSTRUCTION PHASING PLAN
PHASE 2
STA. 36+00 TO END

PUULOA ROAD IMPROVEMENTS
Kamehameha Hwy. to Salt Lake Blvd.
Federal Aid Project No. STP-7310(1)

Scale: As shown — Date: May 2003

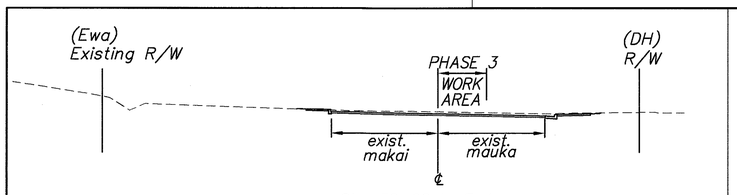
SHEET NO. 85 OF 193 SHEETS

ADD. 85

PREFIX: G:\DGTH96017A\ACAD\ FILE: Dot96176aR.dwg BEGIN: 12/01/99 SCALE: 1=1
P.M.: STY CURRENT OPR: mkf PREV. OPR: CURRENT TIME: Feb 23, 2004 – 1:17pm LAST SAVED BY: LAST MODIFIED: Mon, 23 Feb 2004 – 10:01am

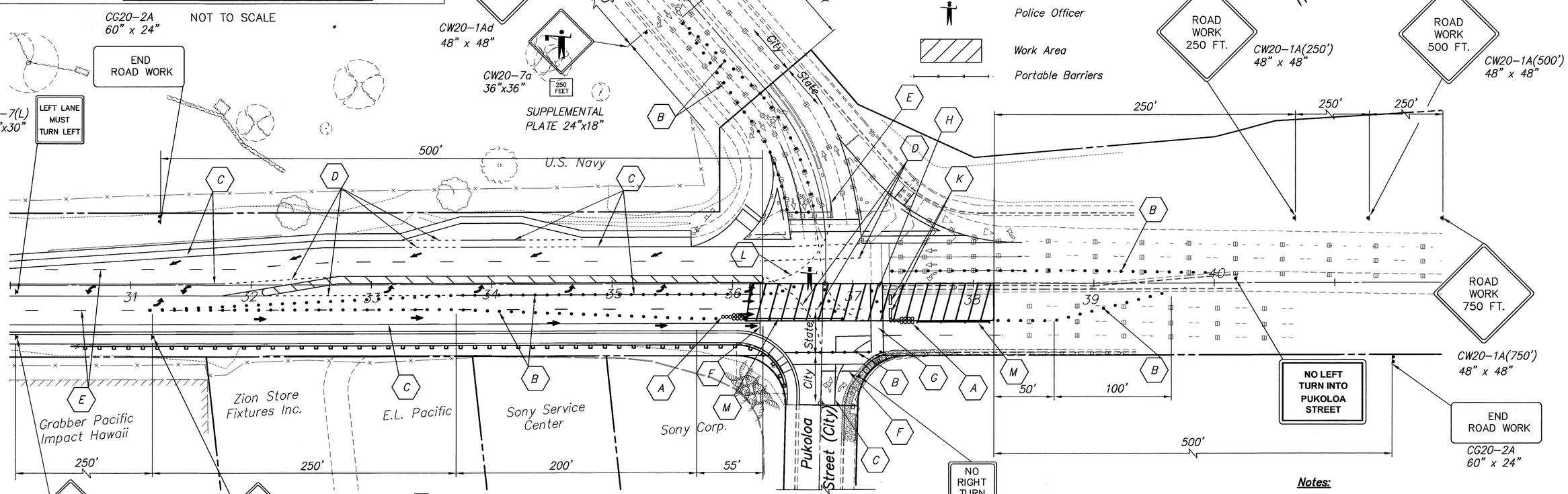
ORIGINAL PLAN | SURVEY PLOTTED BY | DRAWN BY | TRACED BY | DESIGNED BY | QUANTITIES BY | CHECKED BY | DATE | NOTEBOOK No.

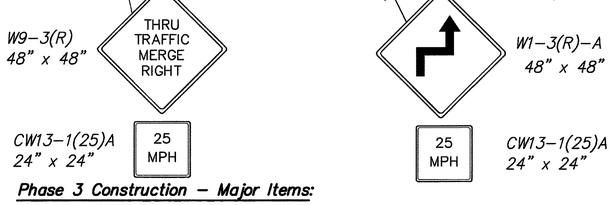
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-7310(1)	2003	86	193

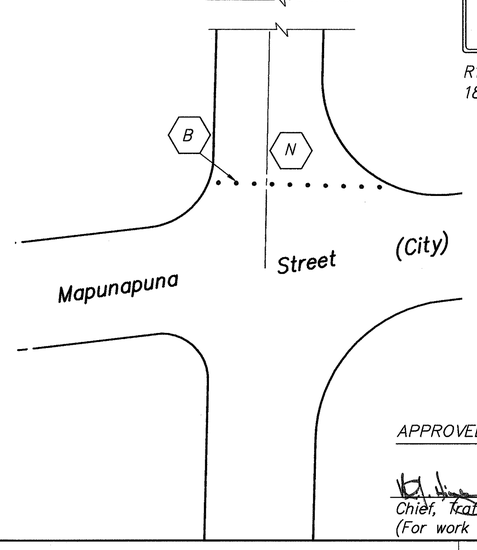


TYPICAL SECTION – PHASE 3

NOT TO SCALE







Legend

- Sign
- Cone or Delineators
- Direction of Traffic
- Flagman
- Police Officer
- Work Area
- Portable Barriers

Phase 3 Construction – Major Items:

1. Excavate to bottom of required pavement section.
2. Hand excavate around utility manholes and adjust as required
3. Install GTE and CATV ductlines
4. Construct curb, sidewalk, and wheelchair ramp.
5. Construct subbase course
6. Construct permeable layer course
7. Construct base course
8. Construct A.C. pavement
9. Provide and install pavement markings and markers

- (A) Provide End Treatment, See Detail, Sheet 94
- (B) Cones or delineators
- (C) Temporary 4" solid white stripe
- (D) Temporary 4" wide white striping 2' long with 4' spacing
- (E) Temporary 4" wide white striping 10' long with 30' spacing
- (F) 12" wide STOP bar
- (G) Temporary cross-walk markings
- (H) Provide pedestrian access during construction
- (J) Temporary 8" solid yellow stripe
- (K) Type II Barricade
- (L) Temporary 4" wide yellow striping 2' long with 4' spacing
- (M) Portable Barriers
- (N) Pukoloa St. closed during working hours. See Detour Plan Sht. 93.

PLAN – PHASE 3

SCALE: 1" = 40'

Notes:

1. For Detour Plan see Sht. 93.
2. All work to be completed during night hours. All lanes shall be opened during non-working hours, unless otherwise noted.

40' 0 40' 80'
SCALE: 1" = 40'

APPROVED:

Chief, Traffic Review Branch, D.P.P. 2/27/04 Date
(For work within City R/W only)

DATE	REVISION
1/28/04	REPLACED SHEET PER ADDENDUM NO. 1

BARRY K. MURANAKA LICENSED PROFESSIONAL ENGINEER No.8418-C HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
Expiration Date of the License: 04/30/04

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CONSTRUCTION PHASING PLAN
PHASE 3
STA. 36+00 TO END

PUULOA ROAD IMPROVEMENTS
Kamehameha Hwy. to Salt Lake Blvd.
Federal Aid Project No. STP-7310(1)

Scale: As shown Date: May 2003

SHEET NO. 86 OF 193 SHEETS

ADD. 86

P.M.: STY
CURRENT OPR: mkf
PREV. OPR:
CURRENT TIME: Jan 16, 2004 – 3:37pm
LAST SAVED BY:
LAST MODIFIED: Wed, 17 Dec 2003 – 9:00am

PREFIX: G:\DOTH9601A\ACAD\
FILE: Dot96179aR.dwg
BEGIN: 12/01/99
SCALE: 1=1

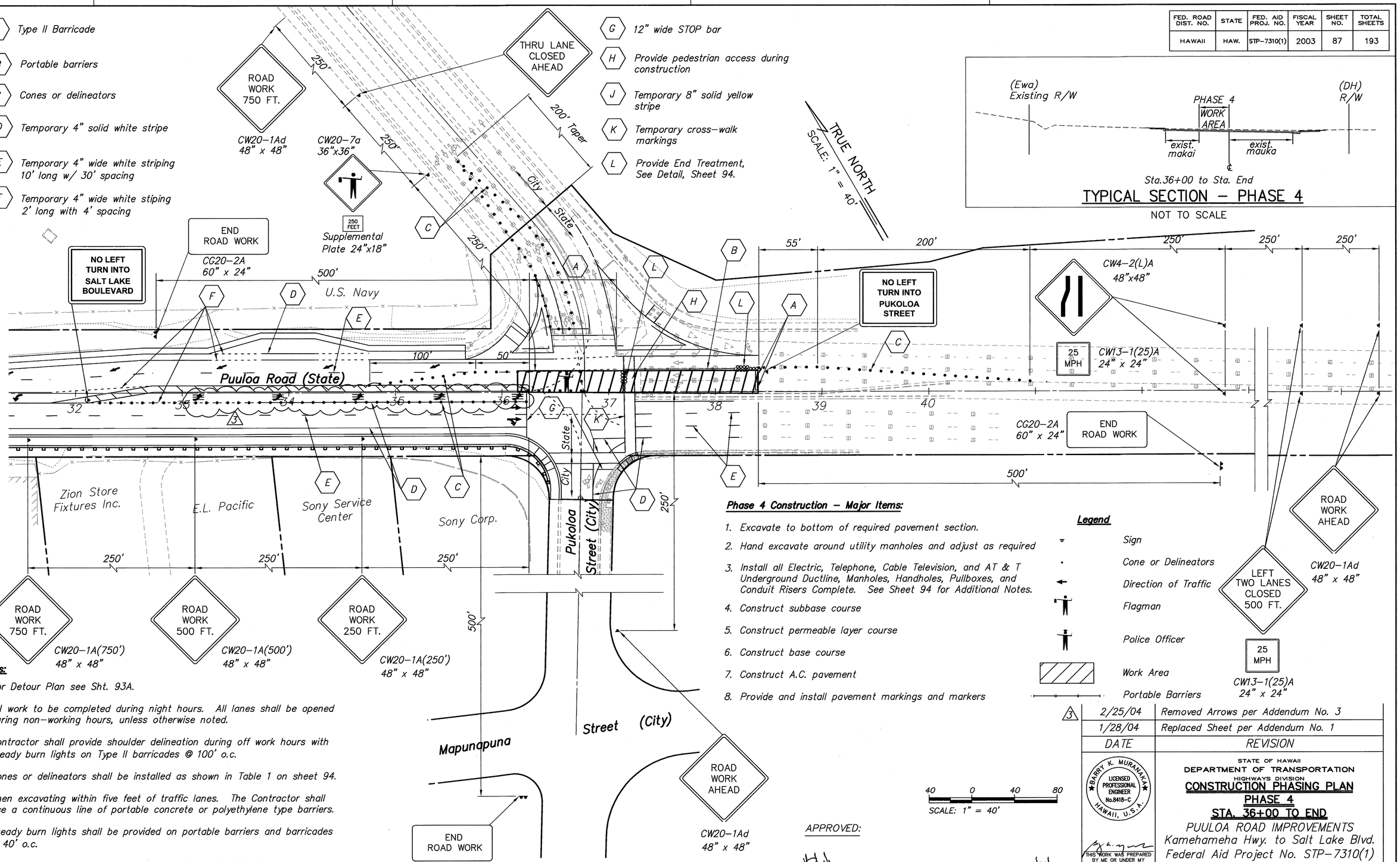
ORIGINAL PLAN | SURVEY PLOTTED BY | DRAWN BY | TRACED BY | DESIGNED BY | QUANTITIES BY | CHECKED BY | DATE | NOTEBOOK No.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-7310(1)	2003	87	193

- (A) Type II Barricade
- (B) Portable barriers
- (C) Cones or delineators
- (D) Temporary 4" solid white stripe
- (E) Temporary 4" wide white striping 10' long w/ 30' spacing
- (F) Temporary 4" wide white stiping 2' long with 4' spacing
- (G) 12" wide STOP bar
- (H) Provide pedestrian access during construction
- (J) Temporary 8" solid yellow stripe
- (K) Temporary cross-walk markings
- (L) Provide End Treatment, See Detail, Sheet 94.

TYPICAL SECTION – PHASE 4

NOT TO SCALE



PLAN – PHASE 4

SCALE: 1" = 40'

Phase 4 Construction – Major Items:

1. Excavate to bottom of required pavement section.
2. Hand excavate around utility manholes and adjust as required
3. Install all Electric, Telephone, Cable Television, and AT & T Underground Ductline, Manholes, Handholes, Pullboxes, and Conduit Risers Complete. See Sheet 94 for Additional Notes.
4. Construct subbase course
5. Construct permeable layer course
6. Construct base course
7. Construct A.C. pavement
8. Provide and install pavement markings and markers

Legend

- Sign
- Cone or Delineators
- Direction of Traffic
- Flagman
- Police Officer
- Work Area
- Portable Barriers

Notes:

1. For Detour Plan see Sht. 93A.
2. All work to be completed during night hours. All lanes shall be opened during non-working hours, unless otherwise noted.
3. Contractor shall provide shoulder delineation during off work hours with steady burn lights on Type II barricades @ 100' o.c.
4. Cones or delineators shall be installed as shown in Table 1 on sheet 94.
5. When excavating within five feet of traffic lanes. The Contractor shall use a continuous line of portable concrete or polyethylene type barriers.
6. Steady burn lights shall be provided on portable barriers and barricades @ 40' o.c.
7. All temporary striping and pavement markings shall be tape.
8. Remove all existing sign in the work area unless otherwise noted.

40 0 40 80

SCALE: 1" = 40'

APPROVED:

Chief, Traffic Review Branch, D.P.P. (For work within City R/W only) — Date 2/24/04

DATE	REVISION
2/25/04	Removed Arrows per Addendum No. 3
1/28/04	Replaced Sheet per Addendum No. 1

BARRY K. MURANAKA — LICENSED PROFESSIONAL ENGINEER No.8418-C — HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Expiration Date of the License: 04/30/04

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CONSTRUCTION PHASING PLAN
PHASE 4
STA. 36+00 TO END

PUULOA ROAD IMPROVEMENTS
Kamehameha Hwy. to Salt Lake Blvd.
Federal Aid Project No. STP-7310(1)

Scale: As shown — Date: May 2003

SHEET NO. 87 OF 193 SHEETS

ADD. 87

P.M.: STY
CURRENT OPR: mkf
PREV. OPR:
CURRENT TIME: Feb 23, 2004 – 1:21pm
LAST SAVED BY:
LAST MODIFIED: Mon, 23 Feb 2004 – 1:20pm
PREFIX: G:\DOTH9601A\ACAD\
FILE: Dot96180aR.dwg
BEGIN: 12/01/99
SCALE: 1=1

ORIGINAL PLAN | NOTEBOOK | No. | SURVEY PLOTTED BY | DRAWN BY | TRACED BY | DESIGNED BY | QUANTITIES BY | CHECKED BY | DATE

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-7310(1)	2003	88	193

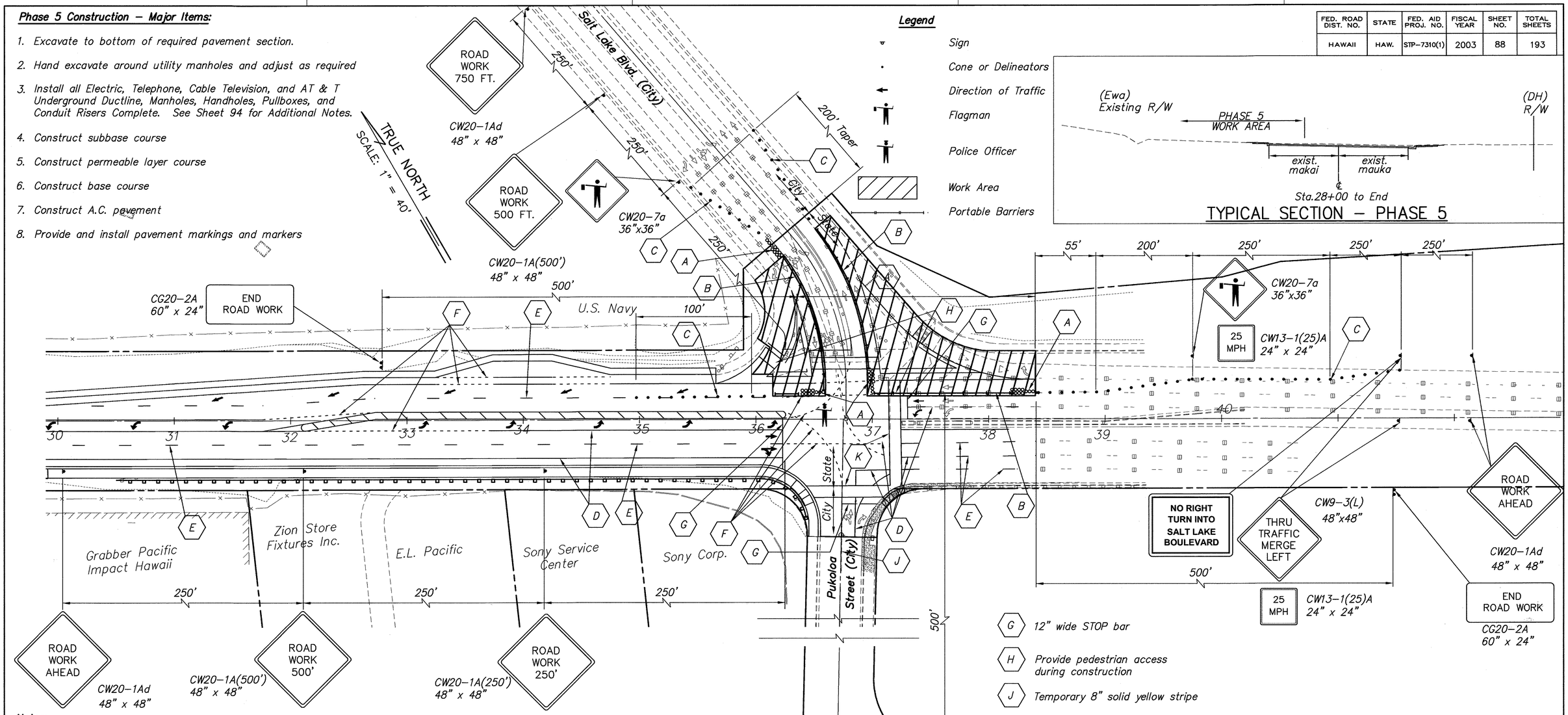
Phase 5 Construction – Major Items:

1. Excavate to bottom of required pavement section.
2. Hand excavate around utility manholes and adjust as required
3. Install all Electric, Telephone, Cable Television, and AT & T Underground Ductline, Manholes, Handholes, Pullboxes, and Conduit Risers Complete. See Sheet 94 for Additional Notes.
4. Construct subbase course
5. Construct permeable layer course
6. Construct base course
7. Construct A.C. pavement
8. Provide and install pavement markings and markers

Legend

- Sign
- Cone or Delineators
- Direction of Traffic
- Flagman
- Police Officer
- Work Area
- Portable Barriers

TYPICAL SECTION – PHASE 5



Notes:

1. For Detour Plan see Sht. 93B.
2. All work to be completed during night hours. All lanes shall be opened during non-working hours, unless otherwise noted.
3. Contractor shall provide shoulder delineation during off work hours with steady burn lights on Type II barricades @ 100' o.c.
4. Cones or delineators shall be installed as shown in Table 1 on sheet 94.
6. When excavating within five feet of traffic lanes. The Contractor shall use a continuous line of portable concrete or polyethylene type barriers.
7. Steady burn lights shall be provided on portable barriers and barricades @ 40' o.c.
8. All temporary striping and pavement markings shall be tape.
9. Remove all existing sign in the work area unless otherwise noted.

- (A) Provide End Treatment, See Detail, Sheet 94.
- (B) Portable barriers
- (C) Cones or delineators
- (D) Temporary 4" solid white stripe
- (E) Temporary 4" wide white striping 10' long w/ 30' spacing
- (F) Temporary 4" wide white stiping 2' long with 4' spacing
- (G) 12" wide STOP bar
- (H) Provide pedestrian access during construction
- (J) Temporary 8" solid yellow stripe
- (K) Temporary cross-walk markings

PLAN – PHASE 5

SCALE: 1" = 40'

40 0 40 80

SCALE: 1" = 40'

APPROVED:

Chief Traffic Review Branch, D.P.P. (For work within City R/W only) — Date 2/25/04

DATE	REVISION
1/28/04	REPLACED SHEET PER ADDENDUM NO. 1

BARRY K. MURANAKA — LICENSED PROFESSIONAL ENGINEER No.8418-C — HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Expiration Date of the License: 04/30/04

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CONSTRUCTION PHASING PLAN
PHASE 5A
STA. 36+00 TO END

PUULOA ROAD IMPROVEMENTS
Kamehameha Hwy. to Salt Lake Blvd.
Federal Aid Project No. STP-7310(1)

Scale: As shown — Date: May 2003

SHEET NO. 88 OF 193 SHEETS

ADD. 88

P.M.: STY
CURRENT OPR: mkf
PREV. OPR:
CURRENT TIME: Jan 16, 2004 – 3:46pm
LAST SAVED BY:
LAST MODIFIED: Wed, 17 Dec 2003 – 9:27am

PREFIX: G:\DOTH9601A\ACAD\
FILE: DOT96181aR.dwg
BEGIN: 12/01/99
SCALE: 1=1

ORIGINAL PLAN — NOTEBOOK — No. — SURVEY PLOTTED BY — DRAWN BY — TRACED BY — DESIGNED BY — QUANTITIES BY — CHECKED BY — DATE

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-7310(1)	2003	88A	193

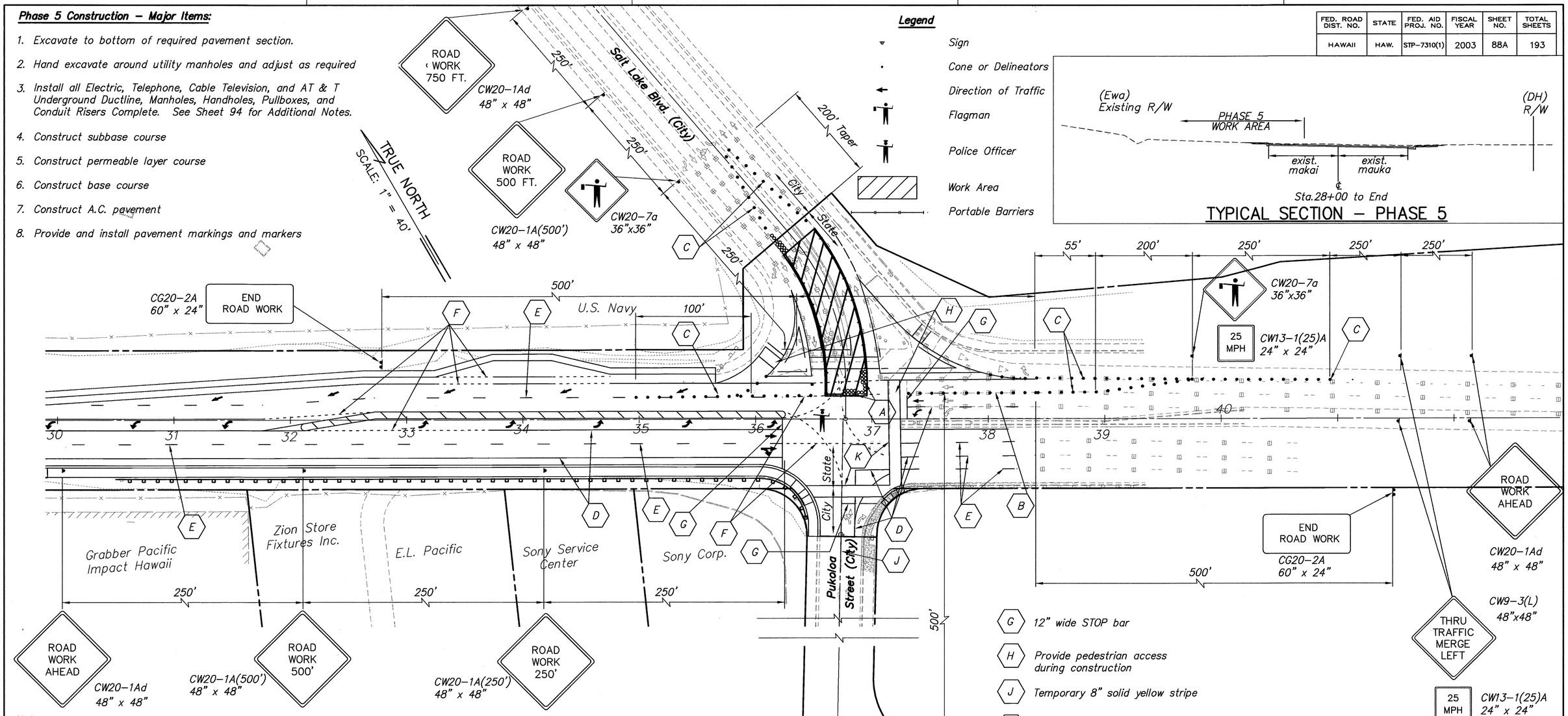
Phase 5 Construction – Major Items:

1. *Excavate to bottom of required pavement section.*
2. *Hand excavate around utility manholes and adjust as required*
3. *Install all Electric, Telephone, Cable Television, and AT & T Underground Ductline, Manholes, Handholes, Pullboxes, and Conduit Risers Complete. See Sheet 94 for Additional Notes.*
4. *Construct subbase course*
5. *Construct permeable layer course*
6. *Construct base course*
7. *Construct A.C. pavement*
8. *Provide and install pavement markings and markers*

Legend

- *Sign*
- *Cone or Delineators*
- *Direction of Traffic*
- *Flagman*
- *Police Officer*
- *Work Area*
- *Portable Barriers*

TYPICAL SECTION – PHASE 5



- (G) *12" wide STOP bar*
- (H) *Provide pedestrian access during construction*
- (J) *Temporary 8" solid yellow stripe*
- (K) *Temporary cross-walk markings*

Notes:

1. *All work to be completed during night hours. All lanes shall be opened during non-working hours, unless otherwise noted.*
2. *Contractor shall provide shoulder delineation during off work hours with steady burn lights on Type II barricades @ 100' o.c.*
3. *Cones or delineators shall be installed as shown in Table 1 on sheet 94.*
4. *When excavating within five feet of traffic lanes. The Contractor shall use a continuous line of portable concrete or polyethylene type barriers.*
5. *Steady burn lights shall be provided on portable barriers and barricades @ 40' o.c.*
6. *All temporary striping and pavement markings shall be tape.*
7. *Remove all existing sign in the work area unless otherwise noted.*

- (A) *Provide End Treatment, See Detail, Sheet 94.*
- (B) *Portable barriers*
- (C) *Cones or delineators*
- (D) *Temporary 4" solid white stripe*
- (E) *Temporary 4" wide white striping 10' long w/ 30' spacing*
- (F) *Temporary 4" wide white stiping 2' long with 4' spacing*

PLAN – PHASE 5

SCALE: 1" = 40'

APPROVED:

Chief, Traffic Review Branch, D.P.P. 2/27/04 Date
(For work within City R/W only)

DATE	REVISION
1/28/04	NEW SHEET PER ADDENDUM No. 1

BARRY K. MURANAKA LICENSED PROFESSIONAL ENGINEER No.8418-C HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
Expiration Date of the License: 04/30/04

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CONSTRUCTION PHASING PLAN
PHASE 5B
STA. 36+00 TO END

PUULOA ROAD IMPROVEMENTS
Kamehameha Hwy. to Salt Lake Blvd.
Federal Aid Project No. STP-7310(1)

Scale: As shown Date: May 2003

SHEET NO. 88A OF 193 SHEETS

ADD. 88 S-1

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FILE: DOT96181aR2.dwg
BEGIN: 12/01/99
SCALE: 1=1

P.M.: STY
CURRENT OPR: rki
PREV. OPR:
CURRENT TIME: Jan 27, 2004 – 4:28pm
LAST SAVED BY:
LAST MODIFIED: Fri, 16 Jan 2004 – 3:51pm

ORIGINAL PLAN | SURVEY PLOTTED BY | DRAWN BY | TRACED BY | DESIGNED BY | QUANTITIES BY | CHECKED BY | DATE
NOTEBOOK No.

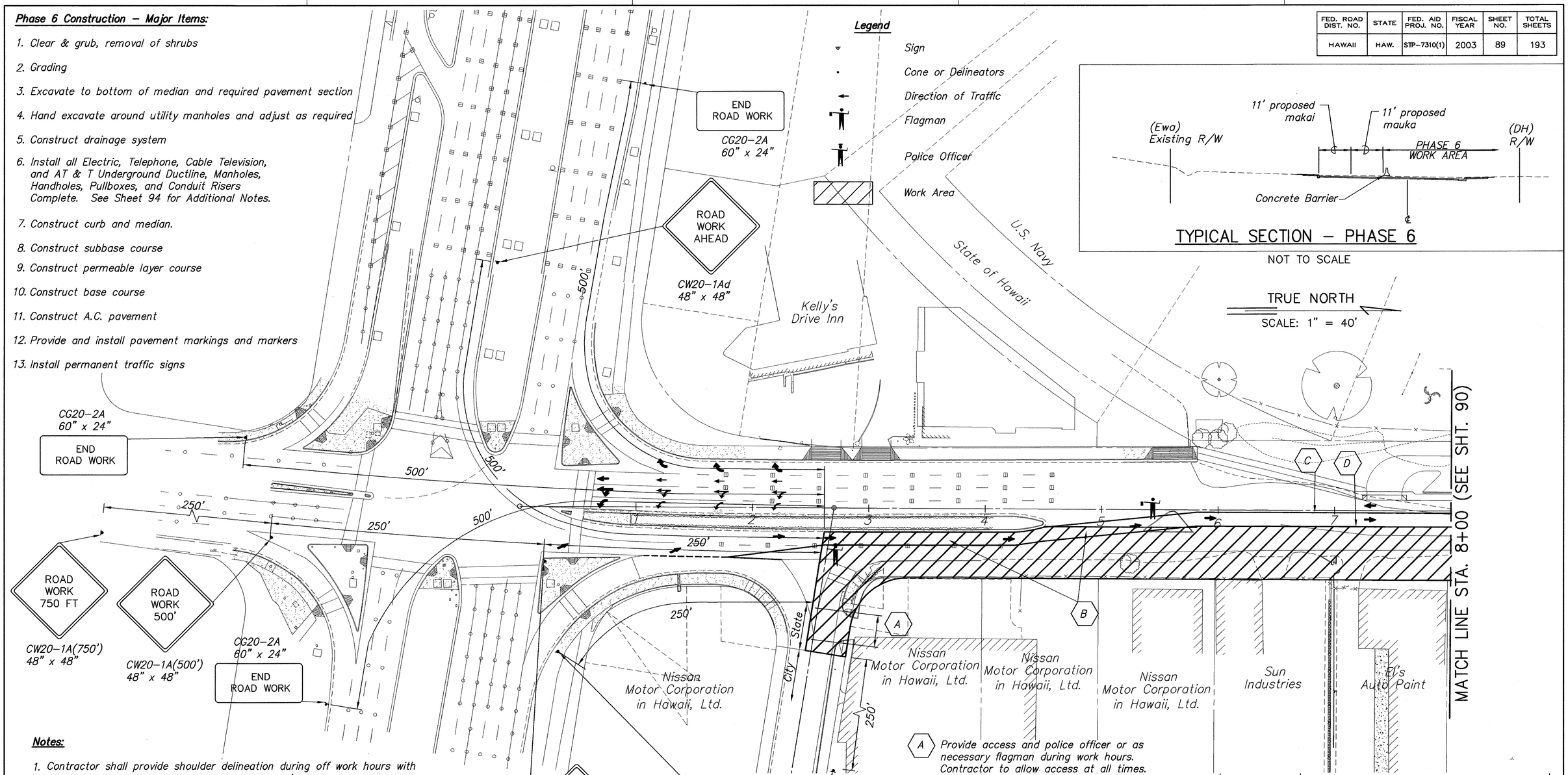
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-7310(1)	2003	89	193

Phase 6 Construction – Major Items:

1. *Clear & grub, removal of shrubs*
2. *Grading*
3. *Excavate to bottom of median and required pavement section*
4. *Hand excavate around utility manholes and adjust as required*
5. *Construct drainage system*
6. *Install all Electric, Telephone, Cable Television, and AT & T Underground Ductline, Manholes, Handholes, Pullboxes, and Conduit Risers Complete. See Sheet 94 for Additional Notes.*
7. *Construct curb and median.*
8. *Construct subbase course*
9. *Construct permeable layer course*
10. *Construct base course*
11. *Construct A.C. pavement*
12. *Provide and install pavement markings and markers*
13. *Install permanent traffic signs*

Legend

- *Sign*
- *Cone or Delineators*
- *Direction of Traffic*
- *Flagman*
- *Police Officer*
- *Work Area*



Notes:

1. *Contractor shall provide shoulder delineation during off work hours with steady burn lights on Type II barricades @ 100' o.c.*
2. *Cones or delineators shall be installed as shown on sheet 94.*
3. *When excavating within five feet of traffic lanes. The Contractor shall use a continuous line of portable concrete or polyethylene type barriers.*
4. *Steady burn lights shall be provided on portable barriers and barricades @ 40' o.c.*
5. *All temporary striping and pavement markings shall be tape.*
6. *Remove all existing sign in the work area unless otherwise noted.*
7. *The Contractor shall follow the approved phasing plans and any deviation from the phasing plans must be approved by the Engineer.*

(A) *Provide access and police officer or as necessary flagman during work hours. Contractor to allow access at all times.*

(B) *Provide at least one lane access*

(C) *Temporary 4" double solid yellow yellow stripe.*

(D) *Temporary 4" solid white stripe.*

PLAN – PHASE 6

SCALE: 1" = 40'

40 0 40 80

SCALE: 1" = 40'

APPROVED:

Chief, Traffic Review Branch, D.P.P. 2/27/04 *Date*
(For work within City R/W only)

DATE	REVISION
1/28/04	REPLACED SHEET PER ADDENDUM NO. 1

BARRY K. MURANAKA LICENSED PROFESSIONAL ENGINEER No.8418-C HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
Expiration Date of the License: 04/30/04

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CONSTRUCTION PHASING PLAN
PHASE 6
STA. 0+00 TO 8+00

PUULOA ROAD IMPROVEMENTS
Kamehameha Hwy. to Salt Lake Blvd.
Federal Aid Project No. STP-7310(1)

Scale: As shown *Date: May 2003*

SHEET NO. 89 OF 193 SHEETS

ADD. 89

P.M.: STY
CURRENT OPR: mkf
PREV. OPR:
CURRENT TIME: Jan 16, 2004 – 3:54pm
LAST SAVED BY:
LAST MODIFIED: Wed, 17 Dec 2003 – 9:55am

PREFIX: G:\DOTH9601A\ACAD\
FILE: Dot96167a.dwg
BEGIN: 12/01/99
SCALE: 1=1

ORIGINAL PLAN		DATE
	SURVEY PLOTTED BY	
	DRAWN BY	
NOTEBOOK	TRACED BY	
	DESIGNED BY	
	QUANTITIES BY	
No.	CHECKED BY	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-7310(1)	2003	90	193

Legend

- Sign
- Cone or Delineators
- Direction of Traffic
- Flagman
- Police Officer
- Work Area

Phase 6 Construction – Major Items:

1. Clear & grub, removal of shrubs
2. Grading
3. Excavate to bottom of median and required pavement section
4. Hand excavate around utility manholes and adjust as required
5. Construct drainage system
6. Install all Electric, Telephone, Cable Television, and AT & T Underground Ductline, Manholes, Handholes, Pullboxes, and Conduit Risers Complete. See Sheet 94 for Additional Notes.
7. Construct curb and median.
8. Construct subbase course
9. Construct permeable layer course
10. Construct base course
11. Construct A.C. pavement
12. Provide and install pavement markings and markers
13. Install permanent traffic signs

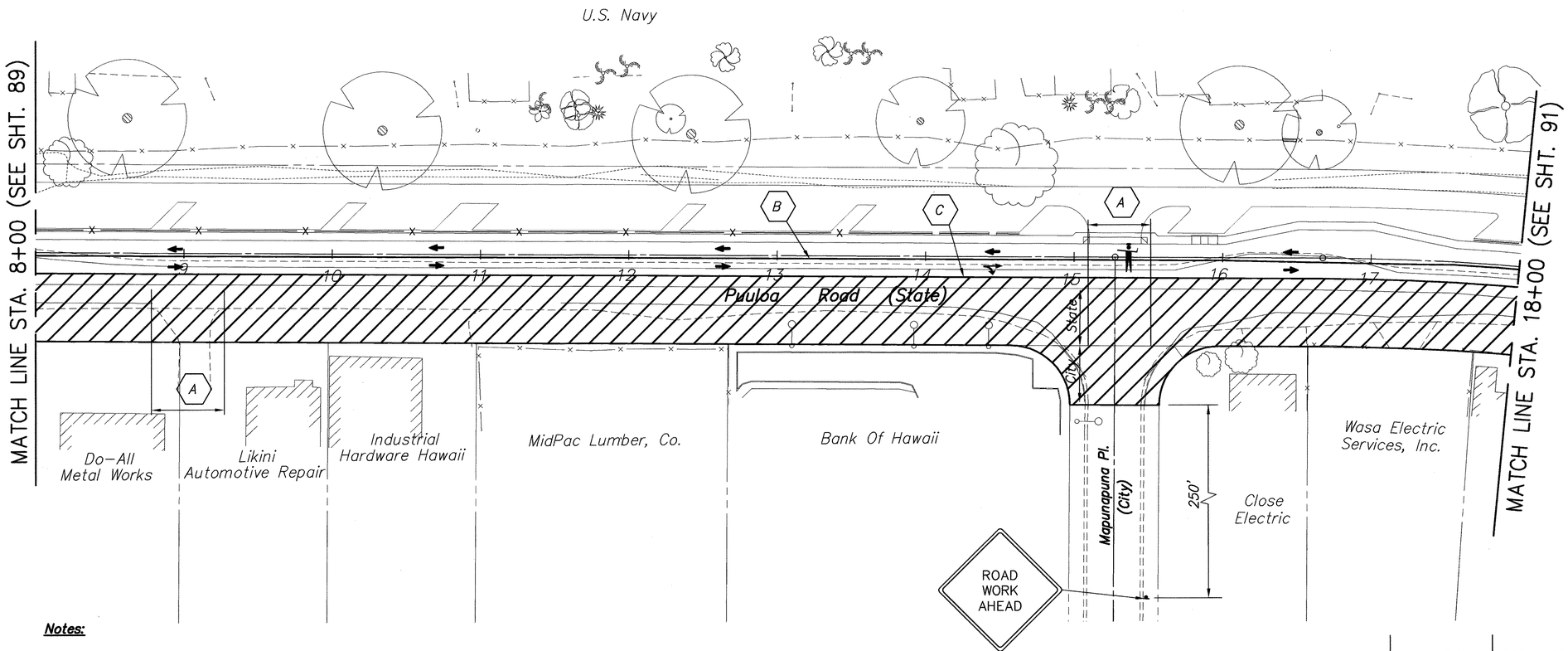
(A) Provide access at all times and police officer or flagman as necessary during work hours. Contractor to complete construction of improvements on one side of driveway or intersection before proceeding with construction on other side of driveway or intersection to allow access at all times.

(B) Temporary 4" double solid yellow yellow stripe.

(C) Temporary 4" solid white stripe.

TRUE NORTH

SCALE: 1" = 40'



40 0 40 80

SCALE: 1" = 40'

Notes:

1. Contractor shall provide shoulder delineation during off work hours with steady burn lights on Type II barricades @ 100' o.c.
2. When excavating within five feet of traffic lanes. The Contractor shall use a continuous line of portable concrete or polyethylene type barriers.
3. Steady burn lights shall be provided on portable barriers and barricades @ 40' o.c.
4. All temporary striping and pavement markings shall be tape.
5. Remove all existing sign in the work area unless otherwise noted.
6. The Contractor shall follow the approved phasing plans and any deviation from the phasing plans must be approved by the Engineer.

PLAN – PHASE 6

SCALE: 1" = 40'

APPROVED:

Chief, Traffic Review Branch, D.P.P. — 2/27/04 Date

(For work within City R/W only)

DATE	REVISION
1/28/04	REPLACED SHEET PER ADDENDUM NO. 1

BARRY K. MURANAKA — LICENSED PROFESSIONAL ENGINEER No.8418-C — HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Expiration Date of the License: 04/30/04

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CONSTRUCTION PHASING PLAN
PHASE 6
STA. 8+00 TO 18+00

PUULOA ROAD IMPROVEMENTS
Kamehameha Hwy. to Salt Lake Blvd.
Federal Aid Project No. STP-7310(1)

Scale: As shown — Date: May 2003

SHEET NO. 90 OF 193 SHEETS

ADD. 90

PREFIX: G:\DOTH96601A\ACAD\
FILE: Dot96168a.dwg
BEGIN: 12/01/99
SCALE: 1=1

P.M.: STY
CURRENT OPR: mkf
PREV. OPR:
CURRENT TIME: Jan 19, 2004 – 8:45am
LAST SAVED BY:
LAST MODIFIED: Fri, 16 Jan 2004 – 3:58pm

ORIGINAL PLAN | NOTEBOOK No. | SURVEY PLOTTED BY | DRAWN BY | TRACED BY | DESIGNED BY | QUANTITIES BY | CHECKED BY | DATE

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-7310(1)	2003	91	193

Phase 6 Construction – Major Items:

1. *Clear & grub, removal of shrubs*
2. *Grading*
3. *Excavate to bottom of median and required pavement section*
4. *Hand excavate around utility manholes and adjust as required*
5. *Construct drainage system*
6. *Install all Electric, Telephone, Cable Television, and AT & T Underground Ductline, Manholes, Handholes, Pullboxes, and Conduit Risers Complete. See Sheet 94 for Additional Notes.*
7. *Construct curb and median.*
8. *Construct subbase course*
9. *Construct permeable layer course*
10. *Construct base course*
11. *Construct A.C. pavement*
12. *Provide and install pavement markings and markers*
13. *Install permanent traffic signs*

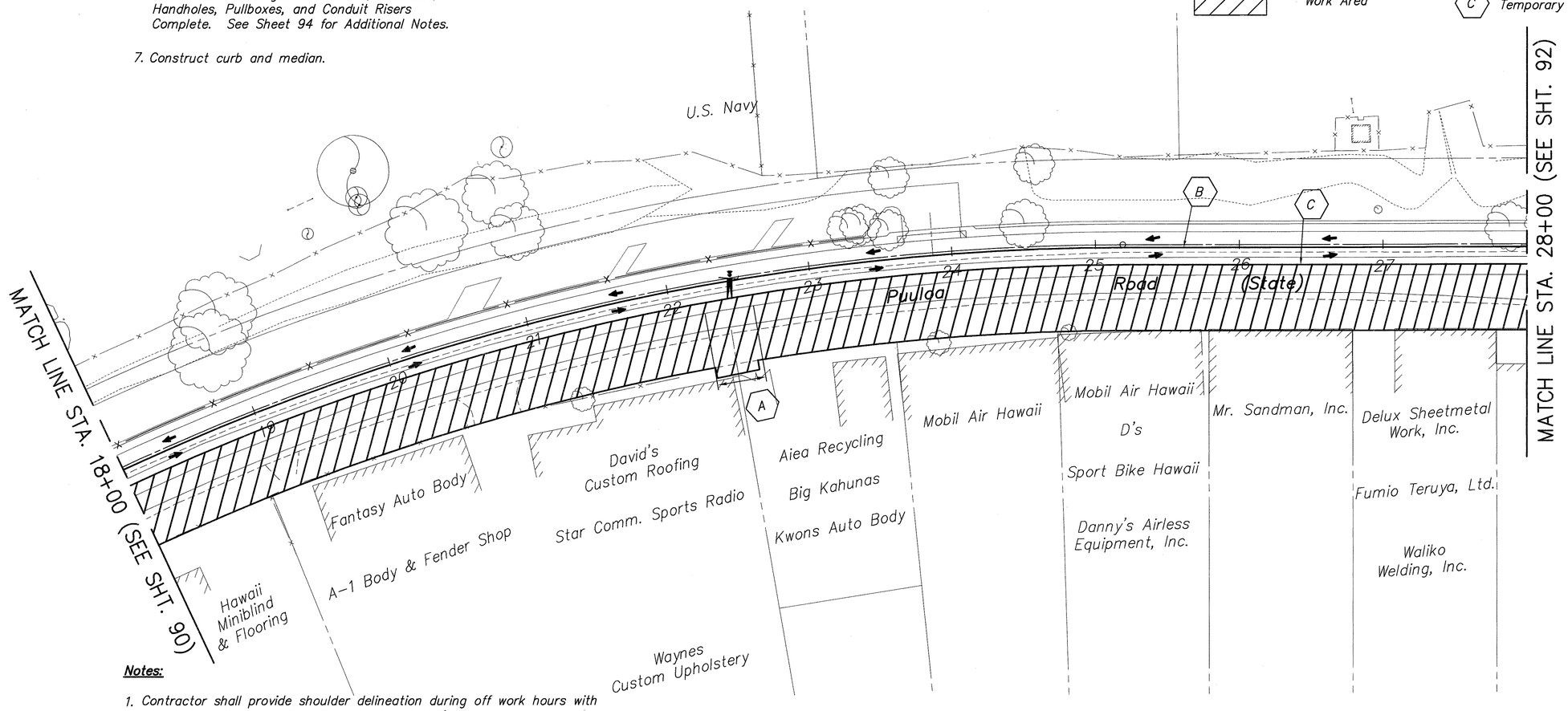
Legend

- *Sign*
- *Cone or Delineators*
- *Direction of Traffic*
- *Flagman*
- *Police Officer*
- *Work Area*

(A) *Provide access at all times and police officer or flagman as necessary during work hours. Contractor to complete construction of improvements on one side of driveway before proceeding with construction on other side of driveway to allow access at all times.*

(B) *Temporary 4" double solid yellow yellow stripe.*

(C) *Temporary 4" solid white stripe.*



Notes:

1. *Contractor shall provide shoulder delineation during off work hours with steady burn lights on Type II barricades @ 100' o.c.*
2. *Cones or delineators shall be installed as shown on sheet 94.*
3. *When excavating within five feet of traffic lanes. The Contractor shall use a continuous line of portable concrete or polyethylene type barriers.*
4. *Steady burn lights shall be provided on portable barriers and barricades @ 40' o.c.*
5. *All temporary striping and pavement markings shall be tape.*
6. *Remove all existing sign in the work area unless otherwise noted.*
7. *The Contractor shall follow the approved phasing plans and any deviation from the phasing plans must be approved by the Engineer.*

PLAN – PHASE 6

SCALE: 1" = 40'

40 0 40 80

SCALE: 1" = 40'

DATE	REVISION
1/28/04	REPLACED SHEET PER ADDENDUM NO. 1

BARRY K. MURANAKA LICENSED PROFESSIONAL ENGINEER No.8418-C HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Expiration Date of the License: 04/30/04

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CONSTRUCTION PHASING PLAN
PHASE 6
STA. 18+00 TO 28+00

PUULOA ROAD IMPROVEMENTS
Kamehameha Hwy. to Salt Lake Blvd.
Federal Aid Project No. STP-7310(1)

Scale: As shown *Date: May 2003*

SHEET NO. 91 OF 193 SHEETS

ADD. 91

PREFIX: G:\DOTH9601A\ACAD\
FILE: Dot961692.dwg
BEGIN: 12/01/99
SCALE: 1=1

P.M.: STY
CURRENT OPR: mkf
PREV. OPR:
CURRENT TIME: Jan 16, 2004 – 4:01pm
LAST SAVED BY:
LAST MODIFIED: Wed, 17 Dec 2003 – 9:49am

ORIGINAL PLAN | SURVEY PLOTTED BY | DRAWN BY | TRACED BY | DESIGNED BY | QUANTITIES BY | CHECKED BY | DATE | NOTEBOOK | No.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-7310(1)	2003	92	193

Phase 6 Construction – Major Items:

1. Clear & grub, removal of shrubs
2. Grading
3. Excavate to bottom of median and required pavement section
4. Hand excavate around utility manholes and adjust as required
5. Construct drainage system
6. Install all Electric, Telephone, Cable Television, and AT & T Underground Ductline, Manholes, Handholes, Pullboxes, and Conduit Risers Complete. See Sheet 94 for Additional Notes.
7. Construct curb and median.
8. Construct subbase course
9. Construct permeable layer course
10. Construct base course
11. Construct A.C. pavement
12. Provide and install pavement markings and markers
13. Install permanent traffic signs

Legend

- Sign
- Cone or Delineators
- Direction of Traffic
- Flagman
- Police Officer
- Work Area

Notes:

1. Install temporary striping as shown.
2. Install necessary signage to accomodate temporary striping.
3. Remove/Cover exist signs that are not applicable.
4. The Contractor shall follow the approved phasing plans and any deviation from the phasing plans must be approved by the Engineer.

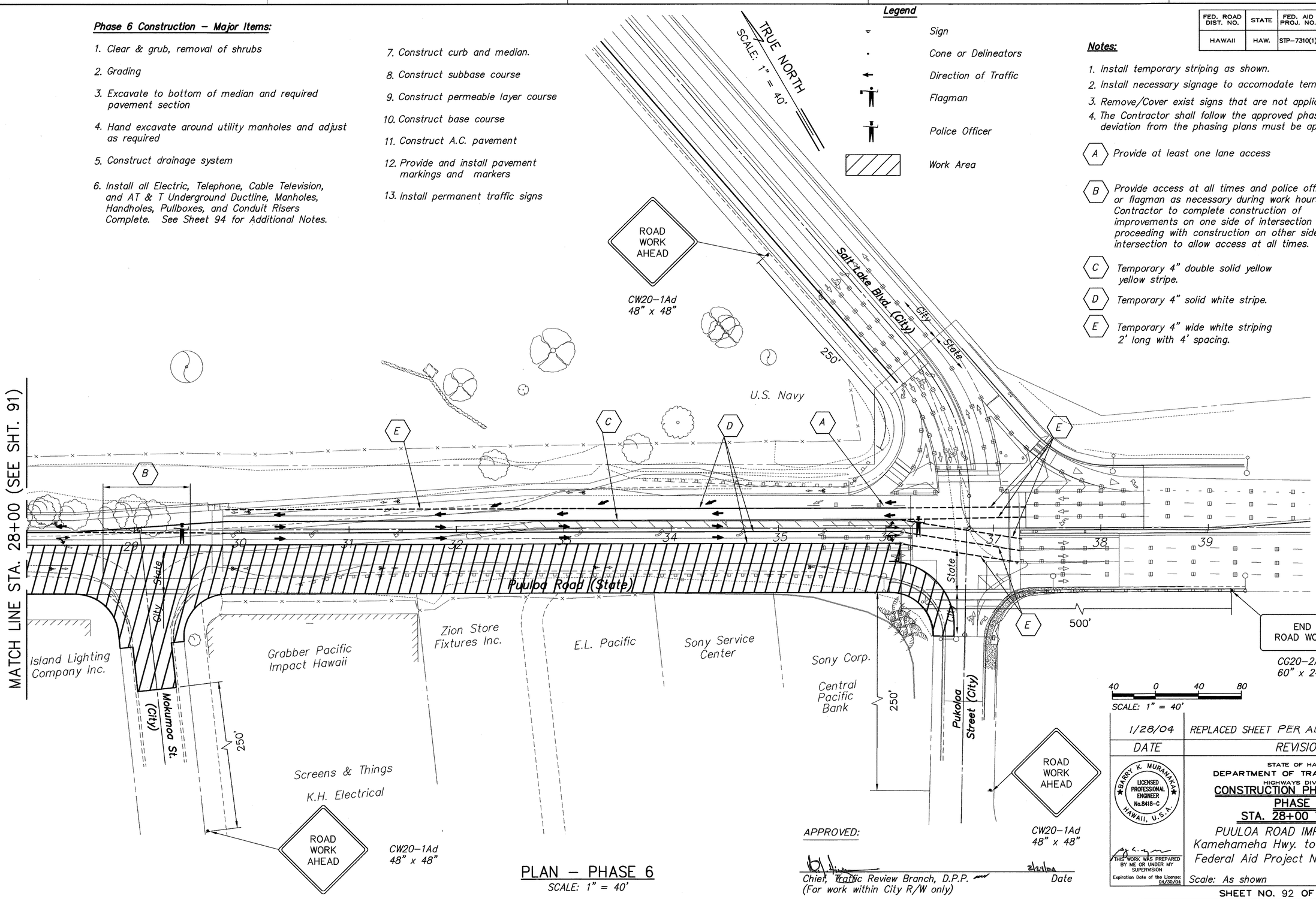
(A) Provide at least one lane access

(B) Provide access at all times and police officer or flagman as necessary during work hours. Contractor to complete construction of improvements on one side of intersection before proceeding with construction on other side of intersection to allow access at all times.

(C) Temporary 4" double solid yellow yellow stripe.

(D) Temporary 4" solid white stripe.

(E) Temporary 4" wide white striping 2' long with 4' spacing.



SCALE: 1" = 40'

DATE	REVISION
1/28/04	REPLACED SHEET PER ADDENDUM NO. 1

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CONSTRUCTION PHASING PLAN
PHASE 6
STA. 28+00 TO END

PUULOA ROAD IMPROVEMENTS
Kamehameha Hwy. to Salt Lake Blvd.
Federal Aid Project No. STP-7310(1)

BARRY K. MURANAKA LICENSED PROFESSIONAL ENGINEER No.8418-C HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
Expiration Date of the License: 04/30/04

Scale: As shown Date: May 2003

SHEET NO. 92 OF 193 SHEETS

APPROVED:

Chief, Traffic Review Branch, D.P.P.
(For work within City R/W only)
2/27/04
Date

PLAN – PHASE 6
SCALE: 1" = 40'

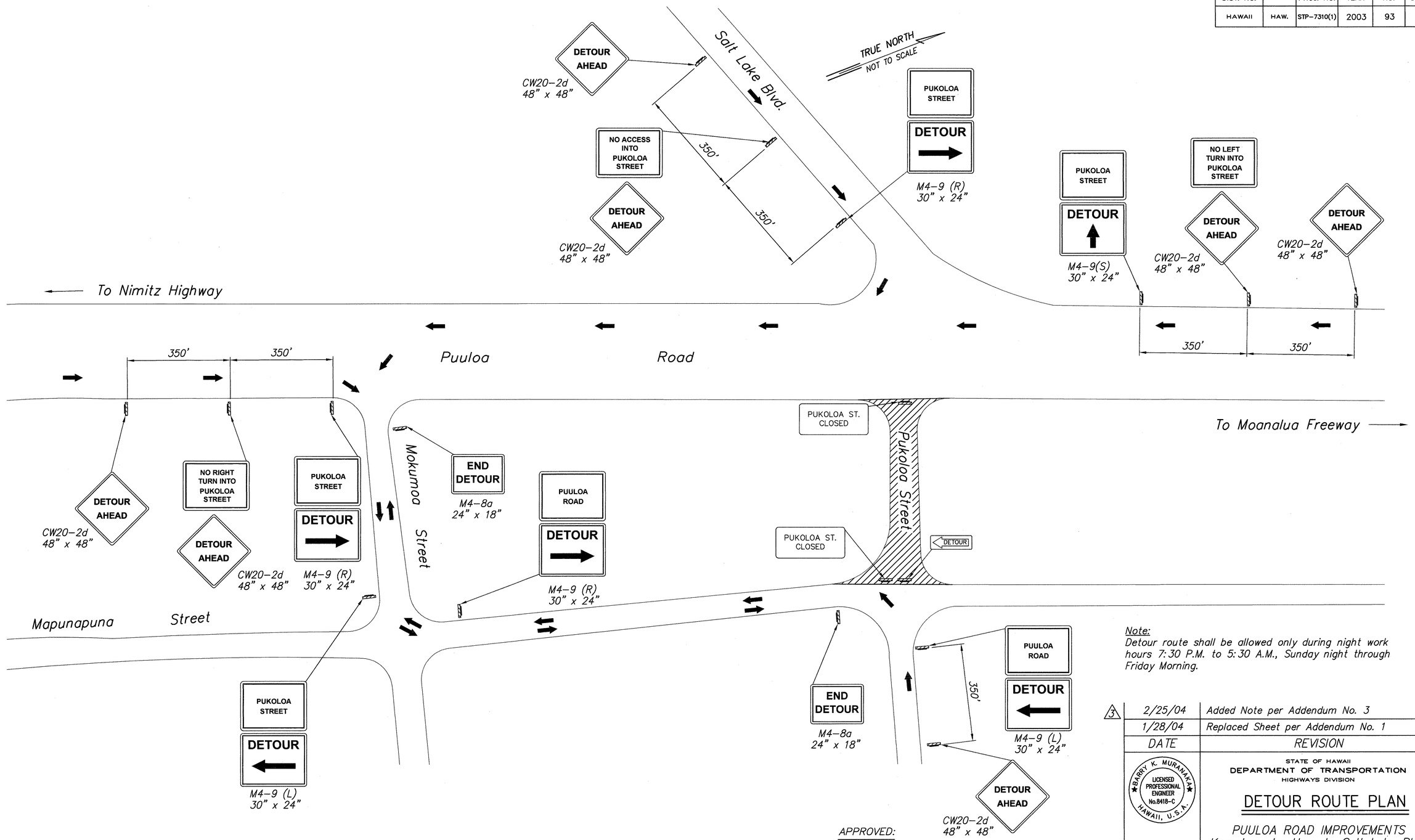
P.M.: STY
CURRENT OPR: mkf
PREV. OPR:
CURRENT TIME: Jan 16, 2004 – 4:16pm
LAST SAVED BY:
LAST MODIFIED: Fri, 16 Jan 2004 – 4:03pm

PREFIX: G:\DOTH9601A\ACAD\
FILE: Dot96170a.dwg
BEGIN: 12/01/99
SCALE: 1=1

ORIGINAL PLAN | NOTEBOOK No. | SURVEY PLOTTED BY | DRAWN BY | TRACED BY | DESIGNED BY | QUANTITIES BY | CHECKED BY | DATE

ADD. 92

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-7310(1)	2003	93	193



Note:
Detour route shall be allowed only during night work hours 7:30 P.M. to 5:30 A.M., Sunday night through Friday Morning.

DATE	REVISION
2/25/04	Added Note per Addendum No. 3
1/28/04	Replaced Sheet per Addendum No. 1

DETOUR PLAN – PUKOLOA STREET

Not to Scale

APPROVED:

Chief, Traffic Review Branch, D.P.P. 2/23/04 Date
(For work within City R/W only)

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

BARRY K. MURAMAKA LICENSED PROFESSIONAL ENGINEER No.8418-C HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
Expiration Date of the License: 04/30/04

DETOUR ROUTE PLAN

PUULOA ROAD IMPROVEMENTS
Kamehameha Hwy. to Salt Lake Blvd.
Federal Aid Project No. STP-7310(1)

Scale: As shown Date: May 2003

SHEET NO. 93 OF 193 SHEETS

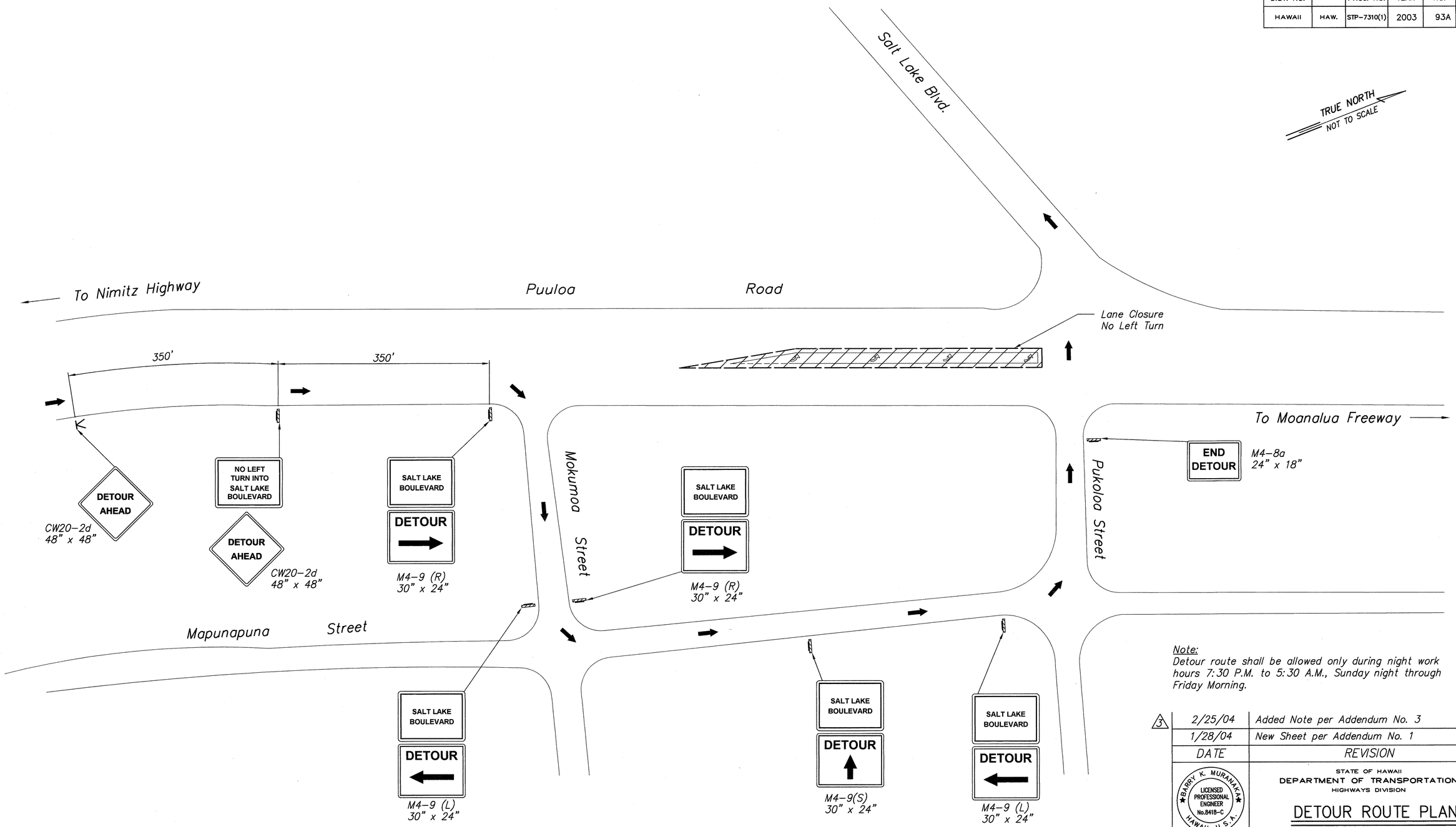
ADD. 93

P.M.: STY
CURRENT OPR: mkf
PREV. OPR:
CURRENT TIME: Feb 23, 2004 – 1:23pm
LAST SAVED BY: rgq
LAST MODIFIED: Mon, 23 Feb 2004 – 10:06am

PREFIX: G:\DOTH9601A\ACAD\
FILE: DETOUR1.dwg
BEGIN: 12/01/99
SCALE: 1=1

ORIGINAL PLAN | NOTEBOOK No. | SURVEY PLOTTED BY | DRAWN BY | TRACED BY | DESIGNED BY | QUANTITIES BY | CHECKED BY | DATE

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-7310(1)	2003	93A	193



Note:
Detour route shall be allowed only during night work hours 7:30 P.M. to 5:30 A.M., Sunday night through Friday Morning.

DATE	REVISION
2/25/04	Added Note per Addendum No. 3
1/28/04	New Sheet per Addendum No. 1

3

DETOUR PLAN – NO LEFT TURN INTO SALT LAKE BLVD.

Not to Scale

APPROVED:

Chief, Traffic Review Branch, D.P.P. (For work within City R/W only) — Date 2/27/04

3

BARRY K. MURANAKA LICENSED PROFESSIONAL ENGINEER No.8418-C HAWAII, U.S.A.

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Expiration Date of the License: 04/30/04

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DETOUR ROUTE PLAN

PUULOA ROAD IMPROVEMENTS
Kamehameha Hwy. to Salt Lake Blvd.
Federal Aid Project No. STP-7310(1)

Scale: As shown — Date: May 2003

SHEET NO. 93A OF 193 SHEETS

ADD. 93 S-1

P.M.: STY
CURRENT OPR: mkf
PREV. OPR:
CURRENT TIME: Feb 23, 2004 – 1:23pm
LAST SAVED BY: rgq
LAST MODIFIED: Mon, 23 Feb 2004 – 10:07am
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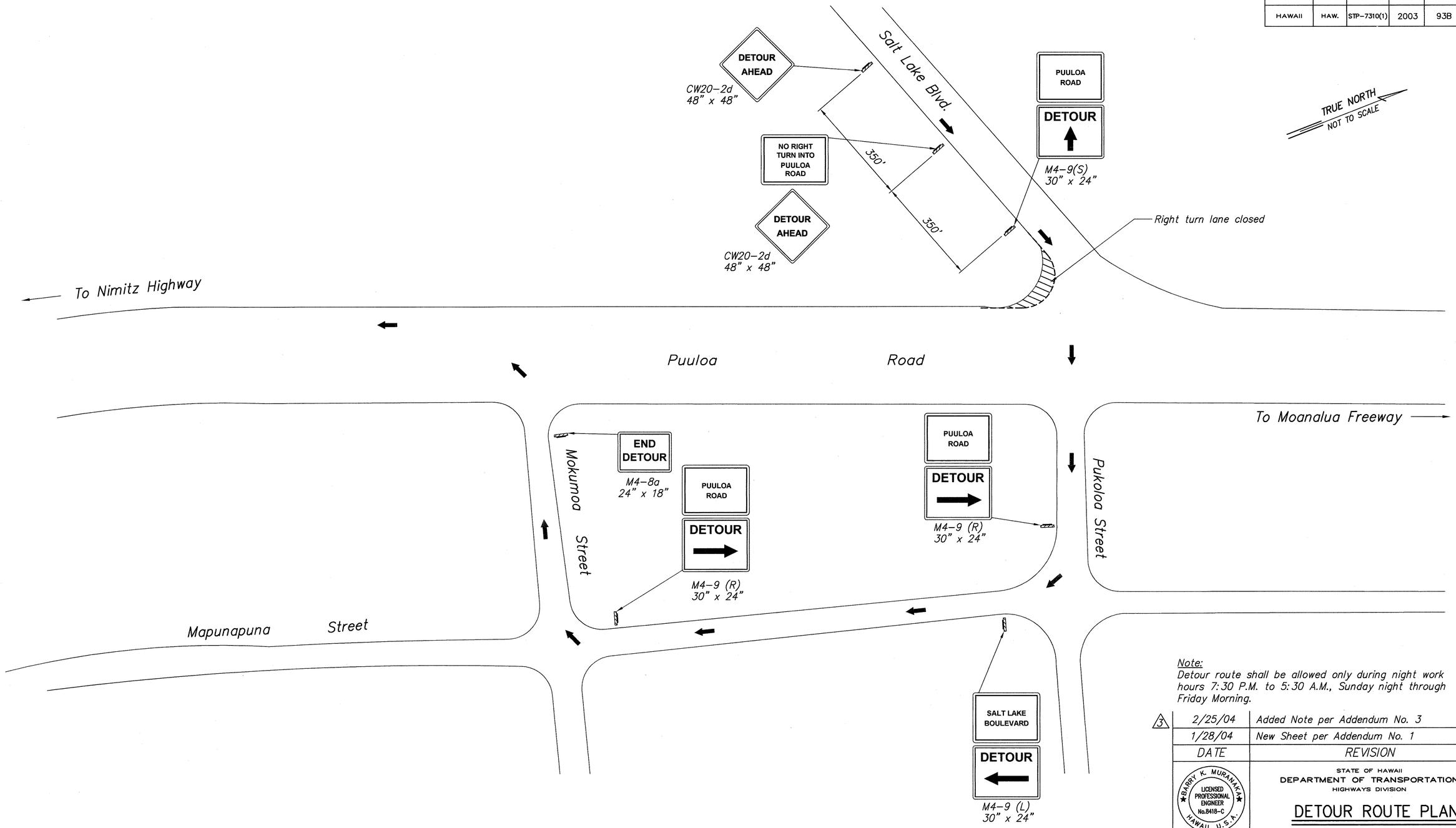
FILE: DETOUR2.dwg
BEGIN: 12/01/99
SCALE: 1=1

ORIGINAL PLAN | NOTEBOOK | No.
SURVEY PLOTTED BY | DRAWN BY | TRACED BY | DESIGNED BY | QUANTITIES BY | CHECKED BY | DATE

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-7310(1)	2003	93B	193



DETOUR PLAN – PUULOA ROAD

Not to Scale

Note:
Detour route shall be allowed only during night work hours 7:30 P.M. to 5:30 A.M., Sunday night through Friday Morning.

DATE	REVISION
2/25/04	Added Note per Addendum No. 3
1/28/04	New Sheet per Addendum No. 1

APPROVED:

Chief, Traffic Review Branch, D.P.P. (For work within City R/W only) — Date 2/27/04

BARRY K. MURANAKA LICENSED PROFESSIONAL ENGINEER No.8418-C HAWAII, U.S.A.

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Expiration Date of the License: 04/30/04

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DETOUR ROUTE PLAN

PUULOA ROAD IMPROVEMENTS
Kamehameha Hwy. to Salt Lake Blvd.
Federal Aid Project No. STP-7310(1)

Scale: As shown — Date: May 2003

SHEET NO. 93B OF 193 SHEETS

ADD. 93 S-2

P.M.: STY
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PREV. OPR:
CURRENT TIME: Feb 23, 2004 – 1:23pm
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LAST MODIFIED: Mon, 23 Feb 2004 – 10:09am
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BEGIN: 12/01/99
SCALE: 1=1

ORIGINAL DRAWN BY
NOTEBOOK No.
SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY
DATE

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-7310(1)	2003	94	193

GENERAL NOTES FOR TRAFFIC CONTROL PLAN

1. The Contractor shall make minor adjustments at intersections, driveways, bridges, structures, etc. to fit field conditions.
2. Cones or delineators shall be extended to a point where they are visible to approaching traffic.
3. Traffic control devices shall be installed such that the sign or device farthest from the work area is placed first. The others shall then be placed progressively toward the work area.
4. Regulatory and warning signs within the construction zone that are in conflict with the traffic control plans shall be removed or covered. All signs shall be restored upon completion of work.
5. Flaggers and/or police officers shall be in sight of each other or in direct communication at all times.
6. When required by the Engineer, the Contractor shall install a flashing arrow signal as shown on the traffic control plans.
7. All traffic lanes shall be a minimum of ten (10) feet wide.
8. All construction warning signs shall be promptly removed or covered whenever the message is not applicable or not in use.
9. The backs of all signs used traffic control shall be appropriately covered to preclude the display of inapplicable sign messages (i.e. When signs have messages on both faces).
10. As soon as the day's work is completed, the Contractor shall remove all traffic control devices no longer needed to permit free and safe passage of public traffic. Removal shall be in the reverse order of installation. Existing faded or obliterated pavement markings that are necessary for safe traffic flow in the construction area shall be replaced with temporary or permanent markings before opening the roadway to public traffic each day.
11. Permanent pavement markings and traffic signs shall be replaced upon completion of each phase of work.
12. Sign spacings and taper lengths shall be as shown on the traffic control plan.
13. Cones and delineators shall be spaced at a maximum distance of 20 feet apart. A minimum of six channelizing devices shall be used for each taper length.
14. Contractor shall control traffic going in and out of driveway(s).
15. Buffer and taper areas on approach to any work site shall be kept clear of vehicles and equipment.

GENERAL NOTES FOR PHASING OF ELECTRICAL UTILITY CONSTRUCTION WORK

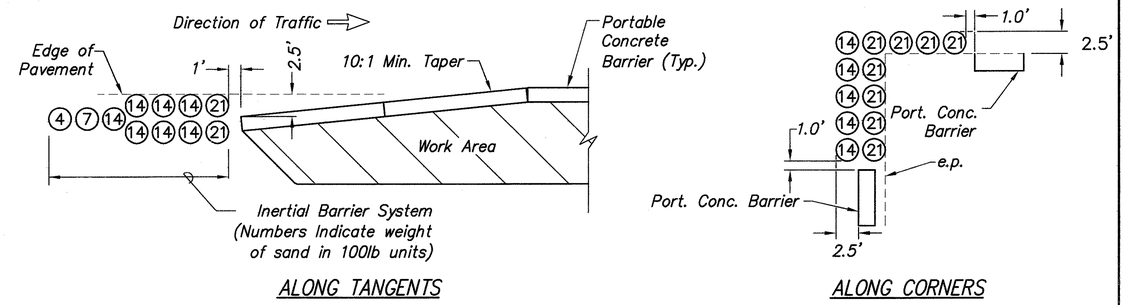
1. Contractor to Install all Electric, Telephone, Cable Television, and AT & T Underground Ductline, Manholes, Handholes, Pullboxes, and Conduit Risers Complete;
   a. Then Respective Utility Companies to Install New Utility Poles, and Install New or Relocate Existing Overhead Lines onto New Poles; Install New Underground Cables in Underground Infrastructure System;
   b. Then Respective Utility Companies to Remove Existing Pole Line and Underground Cable System and Abandon Existing Underground Infrastructure in Place.
   c. Construction Constraints:
      (1) Existing Utility Pole Lines Cannot be Removed Until New Utility Pole Line System Installation Completed.
      (2) Existing Utility Underground Ductline System Cannot be Demolished Until New Utility Underground Infrastructure System Installation Completed.

PHASING NOTES:

1. Contractor shall start at Phase 1 and not proceed to the next construction phase or sub-phase (e.g. – 1 to 2) without approval by the Engineer. Any requests for adjustments in sequence of Construction Phasing shall be submitted in writing and approved by the Engineer. Work performed out of phase without the permission of the Engineer will be considered in violation of the Contract Documents and be considered unacceptable. Such unacceptable work will not be considered for payment until the Phase that it is part of starts.
2. Work listed for the Phase in the Construction Phasing Notes may be a partial listing of the work to be done during the Phase. It is the intent of the Phasing to limit the work to the area shown on the Plans and during that time period. All work in the area, unless specifically noted to be done in another Phase, shall be completed before moving on to the next phase.

CONSTRUCTION HOURS AND ROAD/LANE CLOSURES

1. The normal working hours shall be from 8:00 A.m. to 3:00 P.M., Monday through Friday.
2. Detour hours shall be from 7:30 P.M. to 5:30 A.M., Sunday night through Friday morning.
3. The Contractor will be permitted to close the left-turn movement from Puuloa Road into Salt Lake Boulevard during detour hours. The detour route plan on sheet 93 shall be in effect during these hours.
4. Detours will not be allowed on weekends from 5:30 A.M. Friday morning through 7:30 P.M. Sunday night, and on State holidays from 5:30 A.M. to 7:30 P.M.
5. The Contractor shall notify the State and County transportation agencies, Police and Fire Departments, Ambulance Service and the Department of Health in writing that detours will be in effect at least five working days before the start of construction.
6. All work during other than normal working hours shall be approved by the Engineer. Traffic control plans provided shall be utilized during these hours.

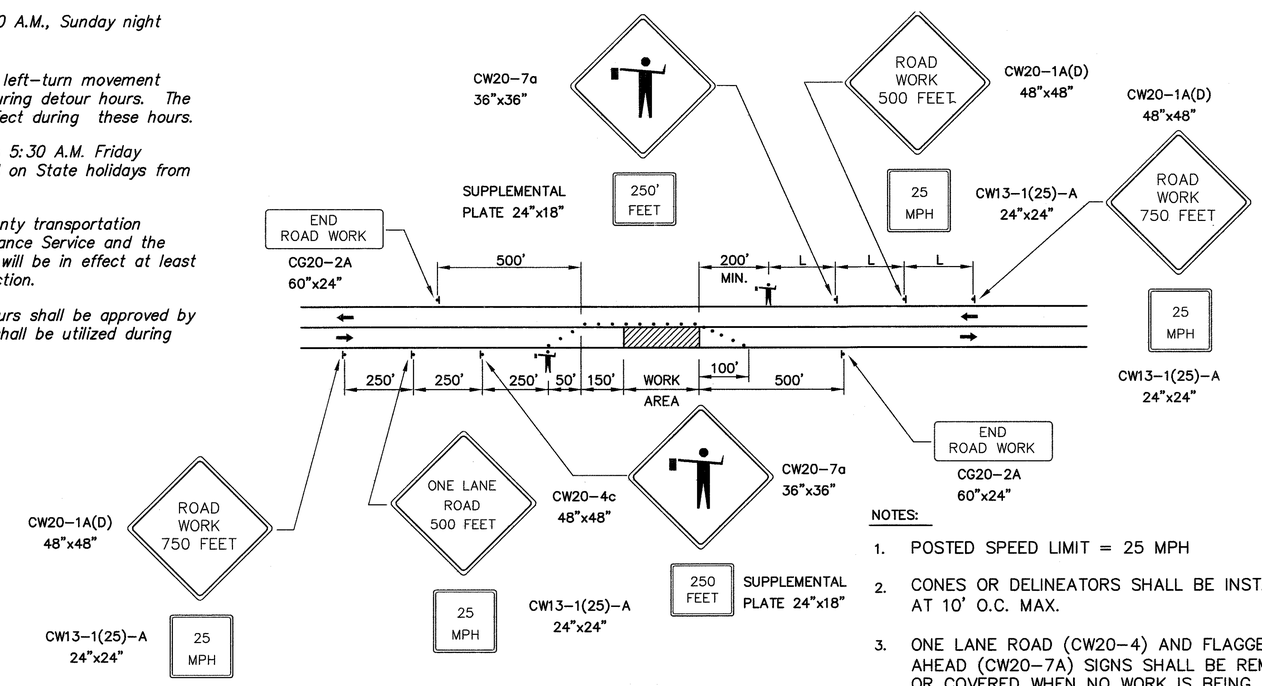


ALONG TANGENTS

ALONG CORNERS

DETAIL – INERTIAL BARRIER END TREATMENT

Not to Scale



TWO-LANE HIGHWAY – ONE LANE CLOSED

TRAFFIC CONTROL PLAN

NOT TO SCALE

NOTES:

1. POSTED SPEED LIMIT = 25 MPH
2. CONES OR DELINEATORS SHALL BE INSTALLED AT 10' O.C. MAX.
3. ONE LANE ROAD (CW20-4) AND FLAGGER AHEAD (CW20-7A) SIGNS SHALL BE REMOVED OR COVERED WHEN NO WORK IS BEING PERFORMED AND LANE IS NOT CLOSED.
4. COVER EXISTING SPEED LIMIT SIGNS WITHIN TRAFFIC CONTROL WORK AREA/SIGNING LIMITS.

Legend

- Sign
- Cone or Delineators
- Direction of Traffic
- Flagman
- Police Officer
- Work Area

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Expiration Date of the License: 04/30/04

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CONSTRUCTION PHASING NOTES, DETAIL, LEGEND

PUULOA ROAD IMPROVEMENTS
Kamehameha Hwy. to Salt Lake Blvd.
Federal Aid Project No. STP-7310(1)

Scale: As shown Date: May 2003

SHEET NO. 94 OF 193 SHEETS

PREFIX: C:\clj\DOTH\DOTH9601A\ P.M.: STY
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BEGIN: 12/01/99 PREV. OPR:
SCALE: 1=1 CURRENT TIME: Jul 30, 2003 – 10:57am
LAST SAVED BY:
LAST MODIFIED: Tue, 29 Jul 2003 – 3:45pm

SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY
DATE
ORIGINAL PLAN
NOTEBOOK
No.